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## SYMPOSIUM ON OBSTETRICS AND GYNECOLOGY

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Studies at an Army Station Hospital showed that most sulfonamide-resistant gonococci are fully susceptible to penicillin; that penicillin resistance is difficult to establish.

*Frisch, A. W.; Behr, B.; Edwards, R. B., and Edwards, M. W., Am. J. Syph., Gonorr., & Ven. Dis. 28:527 (Sept.) 1944.*

From a study of 109 patients, the conclusion is drawn that penicillin effectively eradicates chemoresistant gonorrhea in the female.

*Greenblatt, R. B., and Street, A. R., J. A. M. A. 126:161 (Sept. 16) 1944.*

At a U. S. Naval Hospital, 200 cases of sulfonamide-resistant gonorrhea treated with penicillin, showed no toxic reactions; all returned to duty in one-third of the time previously required.

*Scarcello, N. S., New England J. Med. 231:609 (Nov. 2) 1944.*

"In the Technical Bulletin of Medicine, No. 26, recently issued by the War Department, penicillin is stated to be the drug choice in the treatment of gonorrhea."

*J. A. M. A. 126:575 (Oct. 28) 1944.*

191 consecutive cases of sulfonamide-resistant gonorrhea responded dramatically to penicillin.

*Wigh, R., and Geer, G. I. Jr., J. Maine M. A. 35:207 (Nov.) 1944.*

No toxic effects were observed in a series of sulfonamide-resistant gonorrhea of the female treated with penicillin. As compared to hyperpyrexia, penicillin treatment "is incomparably easier, simpler, safer, cheaper, and just as effective."

*Barringer, E. D.; Strauss, H., and Horowitz, E. A., N. Y. State J. Med. 45:52 (Jan. 1) 1944.*

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		or (b) Intramuscularly: 10,000 to 20,000 every 3 or 4 hr.	40,000 to 120,000 or more	(b) Concentration: 5000 U. per cc. normal saline.
		or (c) Intramuscular drip	40,000 to 120,000 or more	(c) Total daily dose in 250 cc. normal saline.
Infants	5000 to 10,000	3000 to 10,000 intramuscularly every 3 hr.	20,000 to 40,000 or more	Each dose in 1 or 2 cc. of normal saline.
<b>Chronically infected</b> compound injuries, osteomyelitis, etc. Adults and children	5000 to 10,000	10,000 every 2 hr. or 20,000 every 4 hr. intramuscularly or intravenously. Larger doses may be necessary at times.	40,000 to 120,000 or more	Concentration for intramuscular inj.: 5000 U. per cc. normal saline. For intravenous inj.: 1000 to 5000 U. per cc. Supplement with local treatment.
<b>Gonorrhea</b>	20,000 every 3 hr. intramuscularly for 5 doses		100,000	Results of treatment should be controlled by culture of exudate.
<b>Empyema</b> Adults and children	30,000 to 40,000 once or twice daily into empyema cavity		30,000 to 80,000	Dissolve in 20 to 40 cc. normal saline and inject into empyema cavity after aspiration of pus.
<b>Meningitis</b> Adults and children	10,000 once or twice daily into subarachnoid space or intracisternally		10,000 to 20,000	Concentration: 1000 U. per cc. normal saline.
<b>Bacterial Endocarditis</b> Adults and children	25,000 to 40,000	25,000 to 40,000 every 3 hr. intramuscularly	200,000 to 300,000	Continuous treatment for 3 weeks or longer. In a few cases the intravenous drip is more advantageous.

\*Based upon recommendations by Chester S. Keefer, War Production Board Penicillin Leaflet, Apr. 1, 1945; and by Wallace E. Herrell and Roger L. J. Kennedy, *Journal of Pediatrics*, 25:505, Dec., 1944.

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# Uterine Inertia and Post Partum Hemorrhage

CAPTAIN LEO T. HEYWOOD, M.C., A.U.S.

No obstetric complication is more annoying than uterine inertia. One may begin with a simple, normal appearing first stage, and find himself confronted with a host of complications before the conclusion of the third stage. Trouble may not end with the immediate post partum period. Morbidity accompanies a high percentage of these cases during the puerperium. Frequently during the course of labor the physician will be confronted with the problem of whether or not he should do various operative procedures in an effort to secure a happy outcome for both the mother and child. It is often not easy to decide what procedure to employ.

This paper, therefore, will very briefly outline certain procedures which can be generally used and emphasize those I find most adaptable for my own personal use.

## REVIEW OF CLINICAL FEATURES

By definition primary inertia is that condition characterized by weak uterine contractions prolonging labor from its onset in an *otherwise normal case*. Secondary inertia on the other hand is that condition characterized by contractions of vigorous quality at the onset of labor, which because of exhaustion due to one cause or another soon become more infrequent and ineffective.

The etiology of primary uterine inertia is far from clear. A long list of varied conditions have been ascribed as directly or indirectly causative factors. I think we can dispense with the etiology of primary uterine inertia by saying that its real cause is unknown. The definition of secondary uterine inertia explains quite adequately its etiology.

The clinical picture and pathology encountered in primary uterine inertia are somewhat variable. The contractions may be infrequent, of short duration, of poor quality or a combination of these three. The first stage is unduly prolonged. Ordinarily the child or the mother is in no danger, especially if the membranes are not ruptured. However, if the membranes are ruptured, fever may be encountered rather soon. Bacteria may be carried into the uterus by too frequent examinations. Frequent rectal examinations may bruise the mucosa and offer a site for bacterial invasion. In the second stage weak uterine contractions result in weak abdominal action because the presenting part is not forced against the perineum firmly enough. Expulsion is slow or arrested entirely; and here one may encounter great danger from pres-

sure necrosis of the pelvic structures. The danger to the child is that of asphyxia from reduction in size of the placental area, of infection resulting in fetal pneumonia, and of constant prolonged pressure upon the cranial vault. In the third stage, because of atonia, separation of the placenta is slow. Severe hemorrhage may follow because of insufficient closure of the vessels at the placental site.

Uterine inertia may be recognized early. The uterus does not harden firmly with each pain. The contractions are short, lasting only five to fifteen seconds, with no progress of labor. Very little suffering may be noted, or, in some cases, the suffering is out of all proportion to the findings. There is very little change in the fetal heart rate during a contraction. Most important of all, one must determine the point where the mother and child *begin* to be in danger. For the child, this usually comes late in the first or in the second stage, and is due to asphyxia, as previously described. This may be suspected by irregular, extremely rapid, or extremely slow fetal heart tones. The dangers to the mother are recognized by a rise in temperature and pulse. A foul discharge may be significant. A great amount of edema or hemorrhage of the external genitalia will suggest the growing danger of ischemic necrosis. These are good criteria for termination of the pregnancy as soon as possible.

I have encountered primary uterine inertia twenty times in the last 800 deliveries. These labors varied in length from thirty-two to ninety-one hours.

The prognosis depends upon the cause of inertia. Trouble may be due to too much delay, too many examinations and manipulations, and from injuries due to unnecessary operative procedures performed too early. Death results quite frequently from massive post-partum hemorrhage. The dangers to the infant are those of asphyxia, infection, and injury from operative procedures. The morbidity is high because of fatigue, bacterial invasion, injury of the soft parts and anemia due to blood loss.

## TREATMENT

The treatment should progress generally along the path of conservatism and supportive therapy. In the first stage, where the membranes are not ruptured, non-interference should be the rule except in the cardiac or the patient with tuberculosis or nephritis. Here, one may make use of the Voorhees bag. Vaginal hysterotomy or Dührsens incisions may be used. Cesarean section may be necessary where some disproportion is in evidence.

I employ the following routine where there is no reason for operative interference.

Read before the Post Graduate Session of the Honolulu County Medical Society, January 11, 1945. Approved for publication. The opinions and views set forth in this article are those of the writer and are not to be considered as reflecting the policies of the War Department.



1. The patient is kept up and about as much as is consistent with her general condition. Good contractions will frequently be stimulated by this procedure alone.

2. A tight abdominal binder is used especially for patients with a pendulous abdomen, where the uterus is rotated or where the patient is obese, as is frequently the case.

3. Two thousand to 3000 cc. of fluid daily is given by mouth. When patient is unable to tolerate sufficient fluids by mouth due to nausea or vomiting, 10 to 25 per cent [*sic*] glucose solution is given intravenously.

4. I try to maintain a 3000 calorie diet. This is again given in part by intravenous solutions where nausea and vomiting interfere.

5. A warm enema is given once every twenty-four hours and this is timed to follow immediately after periods of rest.

6. Meticulous bladder care is observed from the beginning. Catheterizations are carefully and frequently done if necessary.

7. Eight to twelve hours of rest should be given every twenty-four hours. Enough sedation should be administered to *produce sleep*. I do not believe that there is a better indication in obstetrics for the use of morphine. I frequently employ morphine in  $\frac{1}{4}$  grain doses along with  $1\frac{1}{2}$  grains of Nembutal and  $\frac{1}{200}$  grain of scopolamine. The room is made absolutely quiet and the patient not disturbed. She is carefully watched to be sure that complete rest is obtained.

8. In the light of our present knowledge and available diagnostic equipment, I do not believe that oxytocics of any kind should be given during the first stage. I have never observed any advantage from the use of pitocin to stimulate labor in uterine inertia. I am quite sure that I have observed some disadvantages, such as further fatigue without any progress whatsoever. It is true that more frequent contractions of short duration or prolonged pains of poor quality usually result. One is discouraged to find, as well, a consistently more apprehensive, discouraged and uncomfortable patient. I have not had the misfortune of seeing any grave consequences, probably because the obstetrician was not as bold as he might have been. Obstetric literature is full of accounts of shock, uterine rupture, deep cervical lacerations, severe vaginal and perineal tears, fetal asphyxia, severe hemorrhage and fetal and maternal deaths due to the ill-advised use of oxytocics.

9. Where fetal distress is present or suspected, I give oxygen by B.L.B. mask. Glucose solutions given at this time may be of some advantage.

10. As a routine, I also give Vitamin K to all patients in prolonged labor.

11. Moral support is most important. I tell the patient and her family in understandable language what problems *we* are confronted with and then reassure her as frequently as necessary. The element of nervousness and apprehension weighs heavily upon these patients from the beginning and it develops progressively during the hours that slowly pass.

Where the membranes are ruptured in the first stage, one must decide whether there is a strong possibility that the delivery cannot be accomplished from below. An X-ray of the pelvis may be of some help in making that decision. A re-examination of the pelvis under sterile conditions should be done if the prenatal study is inadequate. One must make sure of the diagonal conjugate, the curve of the sacrum, the adequacy of the outlet, the distance between the ischial spines, and whether or not the fetus will engage, by employing the Hillis maneuver. Make some determination of the size of the baby. A cesarean section may be necessary and if so, it ought to be done as early as possible. An adequate test of labor should be allowed if the findings of disproportion are not clear cut.

Should you determine that the delivery can be accomplished from below, limit the number of examinations. Employ supportive therapy to the limit. Watch carefully for the signs of maternal and fetal complications which quite frequently occur during the last of the first and during the second stages of labor. Where no sepsis or fetal embarrassment is present, the Voorhees bag may be employed to aid dilatation. Scalp traction may also be done, but here one must accept sloughs, which frequently occur. Manual dilatation is mentioned only to be condemned. Titus states that "those who need artificial enlargement cannot be manually done without laceration and those who can be dilated sufficiently seldom need it." Bipolar podalic version of Braxton Hicks is useful in some cases but, is very difficult to perform. Where sepsis is present extraperitoneal cesarean section may be the answer. Great skill and experience is necessary to successfully perform this operation.

In the second stage of labor, where no maternal or fetal complications are present, one may proceed along expectant lines. Forceps or podalic version and extraction may be done here, depending upon the conditions present. Once the labor has proceeded this far, delivery may usually be accomplished successfully if enough time is given.

The third stage of labor, in uterine inertia, may be accompanied by serious complications, chiefly hemorrhage. Post partum hemorrhage must be expected. Everything should be in readiness. The causes of post partum hemorrhage are atony of the uterus, retention of all or part of the placenta and membranes, and lacerations of birth canal. The diagnosis is evident. Where the uterus is contracted, and bleeding persists, one should look for lacerations of the cervix, of the vagina (especially the anterior vaginal wall), and of



the perineum. Treatment should be started immediately. Anesthesia should be stopped if possible; light inhalation anesthesia may, however, be necessary. The uterus should be immediately massaged vigorously if necessary and one ampule of Ergonovine given intravenously. The bladder should be catheterized, if this has not already been done. In many instances, these procedures alone will control the hemorrhage. If, however, bleeding continues, redrape and regown if there is time. Inspect the birth canal. It may be necessary at this point to repair a laceration. Inspect the uterus for placental tissue and remove it all. The uterus may be compressed between the hands and anteflexed and, if massaged, will frequently contract. However, if bleeding persists, no time should be wasted to accomplish thorough packing of the uterus and the vaginal canal. Fluids and plasma may

be immediately given if blood is not at hand. Where no blood bank is available, a donor ought to be in readiness. Nothing but blood is of any permanent value. One must not forget rupture of uterus if operative procedures have been done. Should bleeding still persist, the uterus may be repacked. Other emergency measures such as clamping the broad ligament, ligating the uterine arteries and closing the cervix have been described by De Lee and others.

I have purposely avoided a discussion of secondary uterine inertia because it is due to fatigue rather than lack of power and entails discussion of many underlying primary complications. All of the supportive therapy mentioned in this paper must be applied and success will only be accomplished through intelligent handling of the primary cause.



# Spontaneous Complete Rupture of the Normal Uterus During Late Pregnancy Before the Onset of Labor

G. C. MILNOR, M.D.

Honolulu

Ruptured uterus during labor is not so uncommon as it is thought to be. Frederick Irwin reports in his textbook on obstetrics that it happened once in every 1,959 deliveries in the Boston Lying-In Hospital. De Lee gives an incidence of 1 in every 2,114 cases from collected reports of 17 authors, but the individual reports varied from 1 in 234 to 1 in 6,100. In our own series of over 8,000 obstetrical cases, it has been encountered only once. Spontaneous rupture of the uterus during late pregnancy before labor starts, according to Dr. De Lee, is one of the rarest accidents in obstetrics. Barsich had collected 78 cases up to 1903. Since then more have been reported. The exact figures are difficult to determine. Whitacre and Fang report in *Archives of Surgery*, August, 1942, 44 ruptured uteri treated at Peiping Union Medical College Hospital. Only 1 occurred before the onset of labor.

## CAUSES

A healthy uterus will rupture only under the most violent indirect injury, but if the muscle is diseased, it may give way during the natural growth of pregnancy, from abnormal contractions caused by violent coughing or vomiting, severe shock or trauma. A previous cesarean scar may leave a weak spot in the uterine wall where rupture may occur; uterine fibroids; or injury from gynecologic operations such as enucleation of fibroids, a curettage, or a suspension operation; malformation such as single or double horned uteri, carcinoma, hydatid mole, fatty and hyalin degeneration, previous infection, small cell infiltration, growth of placental villi in the uterine wall, abruptio placenta and placenta previa, all are predisposing causes. An abnormally large baby, twins, malposition of the child in utero, especially the transverse position, also are causative factors. Of the 78 cases reported by Barsich, 31 ruptured during the first five months of gestation, and in these the uterine wall was diseased.

## CLINICAL FEATURES

This case report deals with rupture of a perfectly healthy uterus during the last month of pregnancy before labor began. The accident is divided into two classes; spontaneous, and violent or traumatic. They are either complete or incomplete. The muscle fibers first separate and tear, then the mucous membrane,

and finally the peritoneal covering of the uterus gives way. The anterior uterine wall is oftenest involved, next the sides, and least frequently, the posterior wall. Double tears are rare.

Symptoms of complete spontaneous uterine rupture are rather clear-cut. A sudden extremely severe pain in the abdomen is complained of. The patient feels as though something has burst within her. Violent retching and vomiting quickly follow. She becomes faint and restless. Cold perspiration is marked. There is dyspnea; precordial oppression occurs. Sudden evacuation of the bowels is another early symptom. The excruciating pain then ceases but the symptoms of severe shock and hemorrhage continue to grow worse. The cessation of pain is due to the extrusion of the fetus from the uterus. Physical examination shows a patient in extreme shock with evidence of massive internal hemorrhage. The abdomen is distended, tender but not tense, and there is no longer any uterine contour to be palpated. Dullness in the flanks is noticed. One can feel irregular masses beneath the belly wall. The pulse is weak, rapid, and thready. Marked pallor is present. These symptoms and physical signs are enough to make the diagnosis of uterine rupture.

## TREATMENT

This must be prompt and radical. An immediate laparotomy is indicated. While the patient and operating room are being prepared for surgery, a small dose of morphine is given. Large doses of morphine sulfate are dangerous in the treatment of shock. The bladder is emptied by catheter. Whole blood transfusion is started and continued during the operation. External heat is helpful but not in an excessive amount. In short, all efforts to combat hemorrhage and shock are made. A general anesthesia is the anesthesia of choice. Local, spinal, or caudal are not safe in such cases. Cyclopropane is the best, if available. Ether comes next. As soon as the abdomen is opened, the fetus should be removed, then the uterus is grasped, and the placenta is removed, after which a subtotal hysterectomy is performed. It is not safe to suture and leave behind a ruptured uterus. The extra time of hysterectomy is not hazardous and the future result of removing the uterus is far superior to the simple suture of the laceration. As much as possible of the fluid in the abdominal cavity, consisting of amniotic fluid, meconium and blood, is aspirated before the abdomen is closed.

Read before the Fifty-fifth Annual Meeting of the Hawaii Territorial Medical Association, May 4, 1945.

The postoperative treatment is the same as after most laparotomies, with greater endeavor to continue to combat the shock and hemorrhage. Blood should be given freely. Gastric dilatation must be watched for, and deflating done early. The prognosis of such cases depends upon the length of time which intervenes between the rupture and the start of treatment as well as the nature of the therapy. Figures are useless in trying to determine the prognosis of these cases. Present day obstetrics, with the help of our splendid hospitals, and the available blood banks, have cut the mortality way down. The sulfa drugs and penicillin also have proved their great value, and the Wangenstein tube also has saved many. In former days such an accident carried a very high mortality rate.

In the *American Journal of Obstetrics and Gynecology*, May, 1944, Bill, Barney and Melody review 23 cases of rupture of uterus occurring from 1925 to 1941 in the Maternity Hospital of Cleveland. Rupture of the uterus occurred once in every 2,756 deliveries. Thirteen of the 23 were spontaneous due to a remote cesarean scar; 5 of the 13 occurred before labor began, 4 were at term and 1 in the eighth month of gestation. Surgery was carried out in 22 of these cases. Three of these died during operation and 1 of peritonitis on the fifth postoperative day. Of the 23 mothers, 18 survived, giving a gross mortality of 22 per cent. Thirty-eight per cent of the babies were saved.

In the *Journal of Surgery, Gynecology and Obstetrics*, July, 1943, Gordon and Rosenthal give an analysis of 30 maternal deaths from ruptured uterus occurring in Brooklyn during a six-year period; spontaneous in 13, all but 2 during labor. No cause could be determined in 3. In 13 cases, operation was not performed, principally because of failure of diagnosis. The diagnosis was made at autopsy in 11 cases. The cause of death in 11 was shock and hemorrhage, and 2 died of peritonitis.

Supravaginal hysterectomy was performed in 16 cases and in 1 case the laceration was sutured. Nine died shortly after the operation from shock and hemorrhage, 4 of peritonitis, 3 of bronchopneumonia; and of the entire 30 cases, 20 died of shock and hemorrhage, 6 of peritonitis, 3 of bronchopneumonia, 1 of anemia.

Adequate transfusions of blood were administered in only 3 cases; 11 received no blood at all. This study was upon 660 puerperal deaths recorded during the period from January 1937 to September 1942, 5.4 per cent of the total deaths being due to ruptured uteri.

Such a report convinces one that poor obstetrics is still being practiced. There is really no excuse for such a high death rate.

## CASE REPORT

Mrs. H., para O, gravida 1, a 27-year-old Jamaican Negro, was first seen in July, 1943. She had been married one month. There had been no menstrual flow since coming to Hawaii on May 31, 1943. Her menses had been quite regular and normal before this and she stated that she had always been well and never had been operated upon. She complained of epigastric distress and nausea. The cause of these symptoms was not determined and after a few weeks she recovered, but her menses failed to appear until December, 1943. They were regular after this until June. She missed the July 15 period. Nausea again started and a diagnosis of pregnancy was made. Physical examination and laboratory tests were quite normal at this time, with a negative Wassermann and Eagle reaction.

On November 16, 1944, an x-ray of the abdomen was taken to be sure of pregnancy. There had been no fetal movements and heart sounds could not be heard. A small fetus was visualized lying in the upper right quadrant of the abdomen in a transverse position with its face and abdomen toward the pelvis. The pregnancy progressed normally. She was seen every three weeks up to February 1, 1945 and then every week, and on her last office visit on February 26, 1945, she seemed to be quite normal. The date of the expected confinement was March 22. An x-ray was to be taken on March 6, 1945.

At 3:00 A.M., March 2, 1945, she was awakened from a sound sleep by feeling the urge to urinate. After voiding she went back to bed. One-half hour later, a most severe abdominal pain started with nausea followed by several very profuse and loose stools. She had retired at 9:30 P.M. feeling fine, and had led a normal life the day before the onset of the attack. She got out of bed, went downstairs for some bicarbonate of soda, thinking that acute indigestion might be the cause of the trouble. The distress grew worse. She felt "as though something had burst" within her. Breathing became difficult and great substernal distress was noticed. She next felt faint and then called her husband, who called me. I instructed him to take her to the hospital at once, thinking that labor had started prematurely. She did not arrive at the hospital until three hours after the onset of the pain. A ten-mile taxi ride did not help matters, and when she arrived, it was noticed that she was in extreme shock. She was cold and clammy, nearly pulseless and the palms of her hands and soles of her feet were chalky white, standing out in bold contrast to her very dark skin. She continued to vomit but said the pains were a little less severe. Her blood pressure was 80/60. The blood count showed 3,100,000 red cells and 61 per cent hemoglobin. The abdomen was tender and distended but not tense. Its contour was very irregular, saddle-like, with a mass in the upper left quadrant and another in the suprapubic region. A diagnosis of ruptured uterus was made.

Morphine, grains 1/6, was given. The bladder was emptied by catheter. Treated whole blood was started while the operating room was being prepared for surgery. Cyclopropane was given while the abdomen was being cleaned. One-half hour elapsed between the time of diagnosis and laparotomy, four hours after the first pain. One thousand cc. of treated whole blood was given in all. A 7-pound stillborn child was found free in the upper left abdomen. The placenta was found to be plugging a 6 cm. rent in the right posterior wall of the uterus. Blood clots and amniotic fluid were present in large amounts in the abdominal cavity. The child was quickly delivered; then the placenta was extracted. The uterus was removed subtotally, after which as much as possible of the blood and fluid were aspirated. The wound was closed without drainage. The operation was done in about thirty-five minutes.

Rapid recovery was made. She was in splendid condition the following day and continued to improve. The temperature did not go higher than 101 F. and became normal on the fourth postoperative day. She was discharged from



the hospital on the twelfth postoperative day in good condition. Postoperative abdominal distention was the only disturbing factor encountered. The fetus seemed to be normal in every respect. The gross and microscopic finding of the uterus is as follows:

"Gross: The specimen consisted of a uterus amputated above the cervix. After formalin fixation it measured 14x10x7 cm. and the wall measured 3 to 4 cm. in thickness. A large tear was present on the right posterior surface, which measured about 6 cm. in length. The edges were ragged and necrotic in appearance. The lower margin of the rent was about 2 cm. above the cervical-uterine junction. Serial sections after fixation showed numerous small irregular hemorrhagic areas on a gray-white surface. No myomas or other circumscribed lesions could be found.

"Microscopic: Numerous blocks of tissue were selected for microscopic examination, not only from the edges of the tear, but also from the back, front and sides of the uterus. These showed edema and congestion and a few areas of red cell extravasation. The covering mesothelium was cuboidal in appearance, and a few trophoblastic elements were present some distance from the endometrial surface. All of these changes were regarded as normal for a postpartum uterus; no pathologic basis for the rupture was discovered.

"Diagnosis: Ruptured postpartum uterus."

#### COMMENT

The actual cause of this sudden accident three weeks before term, and before the onset of labor, is unexplained. There was no definite disease of the uterus demonstrated. One can speculate that there may have been a sudden violent movement of the fetus which in turn caused a violent contraction lacerating the uterus.

#### CONCLUSION

It is strange for such a thing to happen in a healthy uterus, in a location where lacerations rarely occur, before labor has started and with no history of any exciting cause.

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# Continuous Caudal Anesthesia in Obstetrics

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The relief of pain during labor has been the subject of much discussion, clinical observation and research in the past half century. It is true that some labors are short and the pain is well tolerated; yet many labors are prolonged and the patients desire and expect freedom from pain or some amelioration of their suffering. Reluctance to use pain-relieving measures in obstetrics is apparently based largely on their possible ill effect on the parturient and fetus.

In obstetrics, a suitable pain-relieving agent is sought that will be safe for the mother and the baby and will not interfere with the normal processes of labor. Many forms of obstetric analgesia have been used in the past and many clinics have adopted one or a combination of more than one and have applied them efficiently with marked success. Most of these provide amnesia during the first stage of labor, but for the completion of the second stage in most instances an inhalation anesthetic is usually necessary. This latter procedure invariably causes marked depression of the respiratory center of the newborn, resulting in asphyxia. A method that will produce relief of pain during the first stage of labor, permit painless progress of the second stage and still serve as an adequate anesthetic during delivery, whether spontaneous or operative, approaches closely to the needs of the obstetrician.

The use of caudal anesthesia in obstetrics dates back to 1909 when Stoeckel applied it to relieve pains during labor. Continuous caudal analgesia as described by Hingson and Edwards seems to answer all the requirements of a satisfactory obstetrical analgesic and anesthetic.

Many attempts have been made before to secure high anesthesia by increasing the quantity of anesthetic fluid and by increasing the force of injection. This has met with a great many failures. The reason for these failures has been thought to be due to the relatively firm connective tissue attachment between the inner wall of the vertebral canal and the dural sac. However, with the use of 1.5 per cent metycaine solution it has been possible to produce a greater upward diffusion of the anesthetic fluid and thus produce a higher level of anesthesia. By this means an epidural anesthesia is produced through the caudal canal.

We have used continuous caudal anesthesia at Beth-El Hospital, Brooklyn, since February, 1943, and have administered it to 750 cases from February 1943 to June 1944. We found that the best position is the left lateral or Sims position with the left lower extremity held in extension and the right thigh flexed.

The sacral hiatus is best located by first palpating the tip of the coccyx, which lies deep in the anal fold. About one and one-half inches above the tip of the coccyx, one can feel a small depression which has the shape of an inverted V or U. This depression is the sacral hiatus, through which the needle is inserted.

Under local infiltration a No. 19 gauge malleable needle as described by Hingson and Edwards is inserted into the caudal canal. One observes then whether spinal fluid or blood appears. If spinal fluid appears, the needle should be removed and this form of anesthesia should not be attempted. If blood is observed the needle should be readjusted until no blood appears.

The initial dose of 30 cc. of 1.5 per cent metycaine is given in divided doses of 8, 10 and 12 cc. at about five- to eight-minute intervals.

When the needle has been inserted properly, anesthesia begins to appear, with complete relief of labor pains about 5 minutes after the last injection of 12 cc. The progress of anesthesia is noted to be as follows:

1. Region of coccyx.
2. Region of rectum.
3. Region of perineum.
4. The vulva area.
5. The inguinal region.
6. Area midway between symphysis and umbilicus.
7. Area up to umbilicus.

The signs that the fluid is properly injected into caudal canal are:

1. Ease with which fluid enters the caudal canal.
2. Pain in leg when fluid is being injected. This is known as sciatic sign. This is not always elicited but when it is present one is certain the solution is entering the caudal canal.
3. Marked relaxation of anal sphincter.
4. The feet and legs after ten minutes become warm, pink and dry.

In order to secure complete relief of labor pains, anesthesia should be maintained up to the level of the umbilicus. When anesthesia goes below this level an additional injection of 20 cc. of 1.5 per cent metycaine is to be given through the attached continuous caudal apparatus. As a rule this is necessary every thirty-five to forty-five minutes.

Rectal examinations are done at intervals to follow the progress of labor. When the patient is fully dilated and the presenting part is low enough for delivery, or the patient is fully dilated for a sufficient time without progress, labor should be terminated.

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I wish to report our experience and observation in our first 250 cases delivered under continuous caudal anesthesia. There were 239 patients delivered by the pelvic route and 11 by cesarean section.

Our criteria for suitability of the use of caudal anesthesia were:

1. Regular uterine contraction, recurring every three to five minutes.
2. Cervix at least 3 to 4 cm. dilated and effaced.
3. Presenting part engaged or engageable.
4. No sign of any infection in region of coccyx.

The average first stage in the multipara lasted one and three-quarters hours and in the primipara three and one-half hours. The longest first stage in multipara was five and a half hours and in a primipara was fifteen hours.

We consider, among these 239 cases, 232 successful and 7 failures. A case was deemed successful if after completion of the initial injections—totaling 30 cc.—the perception of pain disappeared. Also, at the same time, uterine contraction continued at the same frequency and intensity as before the administration of the anesthetic. The anesthesia was further considered to be successful when delivery could be effected without being supplemented by any other form of anesthesia.

A case was considered a failure when it did not meet all the above criteria. Among seven failures, four went to full dilatation without pain under continuous caudal anesthesia. But at this point the needle became dislodged and re-insertion difficult. The other three failures were considered total failures because although the needle appeared to be properly inserted in the caudal canal, the perception of pain did not cease and the needle had to be withdrawn.

There were twelve spontaneous deliveries in this series while the remainder were delivered with forceps. The high incidence of forceps deliveries can be explained by the fact that although the patient is conscious and willing to cooperate, the bearing down sensation is completely absent. The second stage of labor may therefore be said to be delayed unless terminated by operative procedure, an experience common in all cases in which some form of obstetrical analgesia is used.

Correction of occipito posterior positions by manual or forceps rotation occurred 30 times. Due to the great relaxation this is easily done.

There is a marked diminution of blood loss during the third stage of labor. This stage is completed in better than average time without the use of oxytocic drugs. There were no retained placentas in this group and no immediate postpartum hemorrhage. The average duration of the third stage was eleven and one-half minutes.

Cesarean section was done eleven times under continuous caudal anesthesia. Ten were successful, while one case needed supplemental gas-oxygen anesthesia during the operation because the level of anesthesia was not high enough.

In all cases there was complete abdominal relaxation. The infant was extracted with ease and removal of the placenta was accomplished without difficulty. All sections were of the low cervical type with transverse incision into the uterus.

All newborns cried spontaneously on delivery and none required the use of artificial methods of resuscitation. There were two still-births in the series, both due directly to traumatic forceps delivery.

As the anesthesia wears off, the patient is conscious of pain in the lower abdomen and perineum. This pain is relatively exaggerated; for the sudden transition from the painless labor and delivery, to even moderate pain causes the patient much discomfort and apprehension. We have therefore administered one-fourth grain of morphine soon after delivery.

We have encountered a small number of cases with urinary retention which is probably due to bladder atonicity. We have discovered that if one does not allow too great bladder distention while the patient is under continuous caudal anesthesia, the incidence of urinary retention after delivery will be greatly diminished.

We have also noticed that some patients will complain of low back pain after delivery; it has been found chiefly in those patients in whom there has been difficulty in entering the caudal canal.

The involution of the uterus and character of the lochia have not differed in any respect from those seen without this form of anesthesia. The entire postpartum course differed in no way from the usual.

#### SUMMARY

1. Relief of pain during labor and delivery is now recognized to be a "must" in modern obstetrics.
2. Cervical dilatation is markedly facilitated, thereby shortening the first stage of labor.
3. The entire labor and delivery can be accomplished under one form of anesthesia.
4. The results upon mother and fetus are good.
5. There is a definite diminution in blood loss.
6. Operative procedures are greatly facilitated due to relaxed pelvic parts.
7. Inhalation anesthesia to terminate labor, with its resultant changes and complications, is avoided.
8. The postpartum course does not differ in any respect from any other form of delivery.



# Endocrine Therapy in Functional Uterine Bleeding

MAJOR ARTHUR M. FARIS, M.C., A.U.S.

Abnormal vaginal bleeding constitutes about 20 per cent of all gynecological complaints, and of this group approximately one-third have no evident pathology to account for their menstrual disturbance. Before arriving at a diagnosis of functional uterine bleeding it is essential that all organic causes of the bleeding be eliminated.

A convenient classification has been used by Hoffman<sup>1</sup>, based on the status of ovarian function: namely, ovulatory and anovulatory types. Ovulation and corpus luteum formation are present in the former whereas they are absent in the latter.

## ANOVLUTORY BLEEDING

Anovulatory bleeding is the most common form. Due to the prolonged follicular activity the usual pathological picture is that of an endometrial hyperplasia, though interval phase or atrophic endometria may be found. The immediate cause of bleeding is not known but various theories include absence of myometrial contractions due to prolonged estrogenic stimulation, alterations of the endometrial vessels, and irregular desquamation of the endometrium. The pituitary gland may be a causative factor through a disturbance of its follicle-stimulating and luteinizing hormones. Minimal variations in thyroid function may play a prominent role, particularly in the younger age groups.

In treatment of functional uterine bleeding, curettage should be the first step, since it is essential in diagnosis and may be followed by re-establishment of a normal cycle. Stander<sup>2</sup> reported that curettage alone resulted in cure or definite improvement in 71 per cent of a series of 283 cases. This procedure is obviously not practical in adolescent patients.

Correction of nutritional defects should not be neglected as an important adjunct to other forms of therapy. Vitamins C and K have been recommended to decrease the permeability of the uterine vessels and shorten the coagulation time. Liver extract and iron should be given when there is an associated anemia.

Despite the immense amount of attention focussed on the subject, no universally satisfactory endocrine preparation or combination of preparations have been evolved. On the other hand sufficiently encouraging results have been obtained to justify their trial.

1. *Estrogens and Progesterone.* Hamblen<sup>3</sup> has described a conservative and fairly satisfactory means of

regulating prolonged and excessive vaginal bleeding using these two ovarian hormones. His treatment is started at the conclusion of a bleeding period by giving an estrogen (estradiol benzoate 0.3 mgm. daily or 0.6 mgm. every second day) for two weeks, followed by progesterin (5 mgm. daily or 10 mgm. every other day) for an equal period. This is to be repeated in a cyclic manner. Regulation of the cycle is attributed to the estrogen in altering the functional capacities of the endometrial vessels, and the restoration of physiologic function is attributed to the progesterone fraction. This therapy has been advocated only in intrinsic ovarian failure and not in extrinsic deficiencies such as hypopituitarism and hypothyroidism. To avoid the expense of prolonged usage the synthetic steroid diethylstilbestrol may be used instead of estradiol compounds.

The injection of oil solutions of stilbestrol or estradiol compounds directly into the anterior lip of the cervix is reported as being successful for the rapid control of excessive bleeding. Satisfactory results may also be obtained by the oral use of stilbestrol in daily doses up to 10 mgm.

The results from the use of progesterone alone have not been encouraging. This may be due, according to Hoffman, to the resistance of the hyperplastic mucosa to the progesterin influence.

2. *Gonadotropins.* Gonadotropins have been extensively employed in the treatment of abnormal vaginal bleeding but their therapeutic value has not been proved. They are derived from three sources: The pituitary gland, pregnancy urine, and serum of pregnant mares.

Human chorionic gonadotropins have been advocated on the hypothesis that they may augment luteal function, but the therapeutic effect, if any, is apparently due to the foreign protein reaction. The recommended treatment is 100 to 500 I.U. during periods of bleeding, followed by 100 to 200 I.U. twice weekly as a prophylactic measure to prevent recurrence. Ovarian stimulation by the preparation is very doubtful.

Equine gonadotropin is apparently of some value in stimulating follicular maturation, but not in the production of ovulation and corpus luteum formation as the first reports claimed. The recommended treatment is 100 to 800 units weekly for two weeks, to be repeated after a rest period of equal time. The therapeutic value in functional bleeding is questionable.

In 1941 Mazer and Ravetz<sup>4</sup> published their initial report on the use of equine gonadotropin for its follicle-stimulating effect combined with chorionic

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gonadotropin for its luteinizing principle. Each cubic centimeter contains 15 synergy rat units and the recommended dose is 0.5 to 1.0 cc. daily or every second day until bleeding is controlled. In their initial series of 18 cases, cures were reported in 14, of which four were pubertal patients. As yet there have been insufficient reports to determine its usefulness. This preparation may produce ovarian enlargement, vomiting, fever and lower abdominal pain, therefore it should be used cautiously.

3. *Androgens.* Many favorable reports have been made on the effectiveness of testosterone propionate for controlling excessive bleeding. The exact action is not known but it is supposed to have an ovarian-depressing influence. Some investigators attribute the results to direct action on the myometrium and blood vessels of the endometrium. The amount necessary to control bleeding ranges from 300 to 700 mgm. Jacoby<sup>5</sup> recommended 15 mgm. intragluteally every second day, starting two weeks before the expected flow, as a prophylactic measure. Hoffman<sup>1</sup> states that uterine atrophy may result in younger women due to the depressing effect on ovarian function. Masculinizing effects should be carefully watched for.

4. *Thyroid Extract.* The beneficial effect of thyroid substance is well recognized in those cases where abnormal bleeding is associated with obesity and hypothyroidism, particularly in the younger age groups. The usual dosage is  $\frac{1}{2}$  to 1 grain, daily.

#### OVULATORY BLEEDING

This type is usually cyclic, occurring from secretory phase endometrium in which there remain small areas of proliferative endometrium. This process has been described by Traut and Juder as "irregular ripening" and considered as an incomplete transformation due to decreased progestin influence. The etiology has not as yet been determined.

Endocrine therapy has been generally unsatisfactory. Some investigators have advocated large doses of progesterone but the results in most cases have not justified its use. Likewise the gonadotropins or androgens have been of little value. Curettage alone has in a small percentage of patients resulted in re-establishment of a normal cycle.

#### SUMMARY

The diagnosis of functional uterine bleeding should be made only after all organic sources have been eliminated. Curettage should be the first step in treatment since it is essential in diagnosis and may be followed by re-establishment of the normal cycle.

Endocrine therapy is often beneficial provided the patients are properly selected and preparations are employed in adequate dosage. Indiscriminate use where no sound basis for organotherapy exists accounts for a high percentage of the unsatisfactory results.

My own preference in treatment of functional bleeding is the cyclic use of estrogen and progesterone as advocated by Hamblen.

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# Management of Breech Delivery

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In the conduct of a case of breech labor one must be guided by several factors, among which are:

1. Age and parity of the patient.
2. Type of breech presentation, such as frank breech, footling, or knee presentation.
3. Abnormalities of the maternal pelvis.
4. Abnormalities of the fetus and membranes, such as placenta previa, twins, gigantism, microcephaly, acrania, hydrocephalus.
5. Degree of maturity of the fetus.

Skill of the accoucheur in conducting a given breech delivery is another exceedingly variable but important factor. The ability to evaluate the whole composite array of facts and factors and to judge which one of several courses to pursue is all important. He should know (1) how and when to perform cesarean section (2) how and when to decompose a breech, (3) how to use the forceps to the aftercoming head, and (4) how to perform the various manual procedures which may be used to aid extraction of an aftercoming head (not forgetting their dangers and limitations) — Veit-Smellie-Mauricean maneuver, Prague maneuver, or Wiegand maneuver.

Generally speaking, there are two schools of thought in conduct of a breech delivery where vaginal birth is believed the method of choice:

1. That which believes that a breech position should be decomposed as soon as a cervix is fully dilated, and
2. That which prefers to allow the fetus to emerge at least until the buttocks are causing the maternal soft parts to bulge.

Irving and Goethals<sup>1</sup> of Harvard are advocates of decomposition of the breech, thereby eliminating the second stage of labor. They emphasize that the umbilicus of the fetus is well below the superior strait when the buttocks of the fetus lie on the maternal perineum, and that this subjects the umbilical cord to compression and is apt to result in fetal asphyxia. Titus<sup>2</sup>, who is usually conservative, approves of this view.

Some logical questions may arise here. Are all men who deliver babies equally competent to decompose a breech with a minimum of danger to both mother and baby? Is this a procedure which should be followed by the average physician in general prac-

tice? Suppose we follow the more conservative method, waiting even though the cervix is fully dilated. How long shall we wait before we interfere? In the primigravida who makes good progress, a liberal mediolateral incision will frequently expedite delivery. Moore and Steptoe<sup>3</sup>, of Johns Hopkins, emphasize the fact that fetal mortality is not increased until the second stage of labor lasts longer than one hour in the primigravida and one and one-half hours in the multipara. They feel that the fetal mortality rate is low when the infant is delivered spontaneously to the umbilicus, that it is as low as when delivered by decomposing the breech, and is easier. Their conclusions are based on an analysis of 1,444 breech deliveries over a period of forty-six years.

A composite review of the data of Moore and Steptoe reveals that the mortality with breech presentations is lowest in the infants weighing from 2500 to 3999 grams and highest above and below these figures. These observations are confirmed by many others. Other factors contributing to fetal mortality are prolapsed cord (higher incidence in footlings than in the frank breech), contracted pelvis (even slight), premature rupture of the membranes, and poor general condition of the mother (wasting disease, malnutrition, etc.).

The following are some of the points which should make for a lowered fetal mortality in breech births:

1. Better prenatal care.
2. External version, properly done. This is quite generally approved. The use of the binder may help. Dangers must be considered. The use of undue force is to be avoided. Do not use it on an anesthetized patient. A disastrous result was reported by Odell<sup>4</sup> in which placental separation, shock, and loss of the baby occurred. Cesarean section with hysterectomy was followed by recovery. In my own practice a gravida II with normal measurements and a frank breech was given the "benefit" of easy external version. The fetal heart tones did not falter at the time. The mother stated that she never again felt the fetus move. Two days later it was stillborn spontaneously, the vertex presenting, cord wrapped twice around the fetal neck. There was nothing other than the version to which I could trace the death. To what extent should such an experience influence the obstetrician? It is difficult to view external version, even an easy one, with nonchalance after such an experience. Although a good procedure, it is not without risk.
3. More widespread use of cesarean sections in the elderly primigravida and in those other mothers

<sup>1</sup>Read before the Post Graduate Session of the Honolulu County Medical Society, January 11, 1945.



who show pelvic contraction. The subject is most ably reviewed by Racker<sup>5</sup> of Manchester, England, who offers convincing argument. It is to be emphasized that cesarean section *per se* carries a risk. The figures for maternal mortality for cesarean section alone have been quoted as 10 per cent. In the hands of the skilled obstetrician, however, the figure is but a small fraction of this.

4. More widespread use of the Piper or some other forceps to the aftercoming head. I use the Piper forceps virtually routinely.

5. Free use of the liberal episiotomy in the primigravida.

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# The Present Status of Organotherapy in Essential Dysmenorrhea

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It is my purpose, as a part of this general discussion of endocrine therapy in gynecology, to outline in a brief form the present status of organotherapy for essential or primary dysmenorrhea. The application of the terms "essential" or "functional" to any malady in medicine implies that the exact etiology is unknown, that all apparent anatomic and pathologic causes have been ruled out and that probably the disorder is not permanent. Secondary dysmenorrhea, or that type of painful menstruation which occurs as the direct result of some definite pathological lesion which can be demonstrated, will not be considered in this discussion.

Essential dysmenorrhea is one of the common problems of the physician and it is estimated that approximately 35 per cent of women complain of this symptom at some time during their lives. As stated previously, the cause of this type of pain associated with menstruation is entirely unknown, but the theories advanced to explain it are certainly numerous and varied. To list and discuss all of these theories would be impossible in this brief outline of the subject but it seems advisable to mention a few of them here to prevent our minds from becoming too firmly attached to any single proposed explanation. It is safe to state that any physician who fails to consider psychogenic and constitutional factors, undiscovered extra-pelvic lesions, thyroid dysfunction and possible allergic manifestations, and directs his attention entirely to implied endocrine imbalance in his treatment of this symptom will be disappointed with his results. In the average case it is probable that two or more of these possible etiologic factors act together in producing the majority of the complex syndromes which we include in the general term of essential dysmenorrhea. It is the common experience of most physicians who have treated these unfortunate individuals that the majority can be adequately relieved of their painful episodes by relatively simple methods of therapy incorporating a consideration of all of the possible etiologic factors mentioned and that only a relatively few patients will continue to complain of intractable and disabling pain during their menstrual periods.

For many years, in the belief that some type of disorder of the endocrine glands constitutes the chief etiologic factor in essential dysmenorrhea, attempts have been made to relieve the pain by administering endocrine products, by experimental investigators and in recent years by the profession in general. During these years it is pertinent to note that practically all of the known hormones, some of which have since

been shown to be inactive, have been and in most instances still are recommended with varying degrees of enthusiasm in the medical literature. This fact alone is at least circumstantial evidence that no specific or entirely satisfactory endocrine therapy has been developed and in view of the unexplained etiology of essential dysmenorrhea such a state of affairs is not too remarkable. Since the great volume of the publications on this subject makes a comparative review of the results obtained with the various hormones impossible and the lack of adequate and scientific control in many of the studies renders such a review impracticable, an attempt will be made to summarize the present views of our best authorities regarding progesterone therapy, estrogenic therapy and androgenic therapy for the disorder under consideration. From such a review we will attempt to derive some worthwhile and practical conclusions, controversial though they may be, regarding the physiologic and pharmacologic actions of each of the hormones and the clinical indications for their employment or rejection as applies to the treatment of essential dysmenorrhea.

## PROGESTERONE THERAPY

A number of years ago it was demonstrated in certain experimental animals that estrogen, the follicle hormone, stimulated uterine contractions and that progesterone, the corpus luteum hormone, depressed the normal contractions of the uterine musculature. These observations led to the employment of progesterone in dysmenorrhea since it has been assumed by many observers that spasm or abnormal contraction of the smooth muscle of the uterus is the immediate cause of the cramp-like pains of the menstrual period. During recent years potent progesterone preparations for subcutaneous injection and oral administration have been available for use but it must be admitted that the results of clinical trials with these hormones has been in general disappointing and that the rationale for their use is not clearly established. My own experience with this form of therapy has not been convincing and it now appears that much of the original enthusiasm and hope for the efficacy of progesterone was based upon incomplete knowledge of its physiological action and inadequately controlled clinical studies. Recently several investigators, notably Bickers<sup>1</sup>, have produced rather convincing evidence that in the human uterus at least progesterone does not abolish or decrease to any considerable extent the muscular contractions. If this observation proves to be true we may have a reasonable explanation for the failure of progesterone to relieve the majority of the painful episodes in clinical trials. At the present time it seems that this form of therapy for essential dys-

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menorrhoea is seldom indicated and probably lacks rational physiologic foundations.

#### ESTROGENIC THERAPY

Potent estrogenic hormones have been used in recent years in the treatment of essential dysmenorrhoea and in 1940 Sturgis & Albright<sup>2</sup> were able to relieve the pain in a majority of patients with injections of estradiol benzoate if it was administered in sufficiently large doses during the first half of the menstrual cycle. They concluded that the estrogen given early in the cycle, beginning on the third to the sixth day and continued through most of the cycle, effectively suppressed the normal stimulation of the ovary by the gonadotropic hormone of the anterior pituitary gland and hence prevented ovulation and corpus luteum formation. They also demonstrated that the effect produced by the estrogenic hormone was only temporary and that when the treatment was discontinued, succeeding menstrual periods were ovulatory and as painful as ever. During the intervening years this work has been confirmed by numerous investigators and it has been shown that the same results can be obtained with any of the active estrogenic substances given by injection or by mouth providing they are administered in sufficiently large doses and early enough in the menstrual cycle to accomplish the effect described. However, it seems apparent that any method of therapy designed to inhibit normal ovulation for the temporary relief of painful menstruation offers little or nothing of clinical value. The possibilities of endangering the fertility of the individual and permanently or seriously interrupting the normal hormone physiology are too real to permit the use of this method of therapy except in the most unusual circumstances as a temporary and strictly palliative measure.

#### ANDROGENIC THERAPY

The androgenic or male hormones have only recently been suggested for the relief of essential dysmenorrhoea. Giest & Salmon<sup>3</sup> first reported their re-

sults with testosterone propionate and methyl testosterone in 1941 and since then confirmatory studies by other investigators have appeared in the literature. At the present time it seems fairly well established that these hormones, like the estrogens, must be administered early in the cycle and in sufficient amounts to suppress ovulation in order to relieve the painful menstruation. The effect of these agents is uncertain and temporary, and only treated cycles are free of pain. In addition to these disadvantages there is always the danger of inducing abnormal hair-growth, deepening of the voice and enlargement of the clitoris unless the total dose given in any one cycle is kept below a rather ill-defined level. Since the method of action of these hormones appears to involve the interruption of the normal pituitary-ovarian mechanism and the possibilities of producing undesired masculinizing effects are definite, there seems to be no indication for this form of treatment in essential dysmenorrhoea.

#### CONCLUSIONS

1. The etiology of essential dysmenorrhoea is still unknown.
2. In the light of our present knowledge organotherapy has little to contribute to the treatment of essential dysmenorrhoea.
3. The interference with the normal pituitary-ovarian relationship with estrogenic and androgenic hormones is not practicable and may be dangerous.

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# Mammoplasty of the Pendulous Breasts

CLARENCE E. FRONK, M.D.

Honolulu

Plastic surgery of the breast has gone through various stages of development, until now, largely through methods of trial and error, it has arrived at a stage of perfection whereby it can rightly take its place along with reconstruction of other parts of the body. The majority of medical schools have chairs of Plastic and Reconstruction Surgery, and include in their curricula plastic surgery of the breast. It has passed the stage where it was reserved largely for those who appeared behind the footlights, or worked before the cameras.

During the last half of the past century, French surgeons alluded to plastic operations on the breast, but it was Girard, in 1910, who called specific attention to this type of reconstruction surgery.

The causes for enlargement of the breast are: accumulation of fat; insufficiency of the suspensory apparatus; and to a minor degree, hypertrophy of the glandular structure. It is the excessive accumulation of adipose tissue which plays the predominant part. The endocrines and genital function play an important role in some few cases. The suspensory apparatus of the breast is not always found as described in textbook diagrams. At times, the suspensory ligament may be well-developed, and in other cases, just slightly indicated.

Kuster believes that the principle factor in suspending the breast is the skin covering. It is apparent that the weight of a large accumulation of fat and fibrous tissue in the breast so stretches the suspensory apparatus that the breast descends and prolapses, and the degree of such prolapse depends upon the degree of tissue accumulation.

Hypertrophy of the breast is often observed, while the rest of the body remains in perfectly normal proportion. Loss of weight through diet and medical means may, on occasion, be in a measure effective to reduce the breasts, but it also creates an unesthetic condition of flap-like skin bags.

In pendulous, congested breasts, the question is no longer one of pure esthetics, but also one of correction of a pathologic entity, causing actual physical distress, such as drawing pains, oppression, tension, various types of eczema, psychic depression, and inferiority complexes. Axhausen says, "Hypertrophy of the breasts, especially in young individuals, is not purely an esthetic condition . . . it is often a serious disease condition."

The ideal results one aims to accomplish in plastic reconstruction of the breasts are:

1. The newly re-formed breasts must be situated in their normal position;
2. They must have the form and size of the normal breast, with no injury to the blood and lymph vessels.
3. The scars should be as inconspicuous as possible.
4. Both breasts should be symmetrical.

All of these prerequisites can be achieved by proper technique. If possible, the function of the breast should not be destroyed.

Reconstruction operations on the pendulous breasts may be divided into four principal divisions:

1. Procedures aimed to suspend the breast after proper dissection to the costal cartilage of the second or third rib (Girard).
2. Transpositions of the nipple, with remodeling of the breast tissue (Lotsch-Kraske, Axhausen, and many others).
3. The third variety, of which the Lexer-Hollander, and Joseph operations are representative, consists of an incomplete detachment of the connection between the breasts, nipple, and skin covering, followed by reconstruction of the form of the breast by excision of the required amount of tissue, and finally, by proper flap placements. These are the two-stage and occasionally three-stage operations (Joseph).
4. Transplantation of the nipple, with plastic reconstruction of the breast. (Max Thorek, Professor of Surgery, Cook County, Graduate School of Medicine.)

Two excellent articles can be found in the *American Journal of Surgery* of March 1945 on plastic surgery of the breast . . . one by Max Thorek, and one by A. Graham Biddle. The same journal for April 1945 has an article on the same subject by Jacques W. Maliniac.

Number 4 is the type of operation which I will discuss tonight, and I have quoted freely, and at times verbatim, from Thorek's published writings. I have adopted this method entirely over the other types of operations because it has been clearly shown that practically all breasts of sufficient size to demand reconstruction surgery are functionless; and that when it is done in the child-bearing period, no harm or inconvenience results. In one personal case, done upon a nurse, who gave birth about two years subsequent to operation, it caused no difficulty. The Thorek type of operation is technically easier to do and the percentages of disaster are much less.

Axhausen, in 1926, in evaluating the various methods, questioned the fate of transplanted nipples as described by Thorek. He stated, "If this important question could be answered in the affirmative, it would then certainly be better to resort to Thorek's

Read before the Fifty-fifth Annual Meeting of the Hawaii Territorial Medical Association, May 5, 1945.

operation than to court a possible necrosis of the nipple, should there occur a mishap by reason of a technical error in performing a transposition operation." It has been clearly shown since that time that these fears are unfounded, and that, properly transplanted, nipples do unite to subjacent structures.

It must be borne in mind that the blood supply of the female breasts springs from the following sources:

- a. the lateral thoracic artery, a branch of the axillary artery.
- b. the internal mammary artery, a branch of the subclavian artery.
- c. the perforating branches, arising from the third to the seventh inter-costal arteries.

The largest of these is the lateral thoracic artery, which courses along the lateral side of the chest and divides into two or three branches, winding its way to the outer half of the breast which it supplies. The second largest blood vessel is the internal mammary artery, which also divides into two or three branches and courses mesially toward the median half of the breast, which it supplies, particularly the central glandular portion. Besides these, there are the arteries which penetrate the intercostal spaces and the pectoral muscles. These also divide into two branches which approach the breast from behind and are responsible for the blood supply of the deeper central portions of the breast. The nipple and its areola are, for the most part, supplied from branches of the inter-costal and the internal mammary artery. The lateral thoracic artery, the largest of the group, does not take part in the blood supply of the nipple, but assumes the responsibility of supplying the outer half of the breast and its surface.

The blood supply plays a very important role in plastic surgery of the breast. If the branches of the internal mammary artery are encroached upon, or if, on the lateral aspect, vessels entering the breast from the axillary line are injured, necrosis may result.

To be assured of a grateful and satisfied patient, there are several objectives that must be kept in mind. Do not operate upon any patient who is not most anxious to have it done, and who has not interviewed a patient who has been previously operated upon a considerable time before. In all overweight patients, do not operate until their weight has been reduced to the amount desired. Do not operate upon any patient who has neurotic tendencies. Thoroughly explain to all patients what is to be done, and the risks involved.

The Thorek type of operation contemplates being done in one stage. This I do not do, because I have been unable, so far, to properly visualize where the resulting nipple transplantation should be. Second, the total time spent in the hospital is considerably less in two stages than in one. The bandaging following

the two-stage operation is infinitely easier to apply, and with much less discomfort to the patient.

Should there be any necrosis of the transplanted areola, it can be corrected from the areola remaining at its normal site.

The one disadvantage is that two anesthetics are required. Some surgeons do the transplantation portion of the operation under local anesthesia. This I have not done as it is easier done under a light general anesthesia.

No patient need remain in the hospital more than one day following the transplantation stage. I have had no patient remaining in the hospital more than five days following the second stage of the operation.

The failures in mammaplastic surgery are largely the result of mistakes in technique and errors of esthetic judgment. Technical failures are due largely, as in other surgical spheres, purely to inexperience. It is rather the avoidable errors of the experienced surgeon in the fields of mammaplastic procedure that require consideration.

Reconstruction of the pendulous, hypertrophic breasts is unquestionably a major operation. It is carried out under general anesthesia, and under the usual aseptic and antiseptic precautions. Keep in mind the blood supply of the breast. If this is interfered with seriously, the result may be disastrous. Most of the failures are due to post-surgical complications which are, mainly, hemorrhage, liquefaction of fatty tissue, or infection, sloughing and gangrene of skin, breast tissue, nipple and areola.

It is of utmost importance to ligate even the smallest bleeders. Secondary hemorrhage, with clot formation, is often responsible for the ruin of an otherwise successful operation. The most common complication is fatty tissue liquefaction. This may, in some cases, be a late manifestation.

The new site of the nipple is extremely hard to arrive at by the various mathematical formulae which have been laid down. The site is selected and marked with methylene blue by pricking the skin with a small hypodermic needle the day previous to operation with the patient stripped to the waist and standing in an erect position, keeping in mind that when the second stage is done, this selected site will be pushed upward between one and two inches.

We must also keep in mind that the size of the areola transplanted tends to shrink to a marked degree so that the amount of skin removed from the new site must be considerably smaller. I have used with entire satisfaction in all cases, a silver dollar as the outline for the areola and a half-dollar for the amount of skin to be removed at the new site of the nipple.

Preliminary to the operation I have used only soap and water cleansing and a sterile dressing.

### TECHNIQUE OF OPERATION

The removal of the skin for the new nipple site is done first. The thickness of the skin removed is such as to leave a thin basal layer of epidermis. The nipples and areolae are dissected as for obtaining a full thickness skin graft. This dissection is made easier by coating the skin with sterile vaseline and then wiping it almost dry. Care must be used to avoid including any subcutaneous or fatty tissue, but near the nipples the dissections must be made deeper in order to include some of the smooth muscle tissue. The transplant is then fixed to its new site by interrupted silk or cotton sutures. The first four sutures must be placed equidistant from each other, that is, at 12, 3, 6, and 9 o'clock. The sutures should be placed closely together, taking care that the edges are brought together meticulously correct.

The raw site, where the areola and nipple have been removed is sutured in a straight line with silk or cotton. In fact, at no time during the operation is anything but silk or cotton used.

The transplant is covered with a square of parafined-mesh gauze, over which is placed several layers of plain gauze.

Upon completion of the operation, the breasts are bound moderately tight by a scultitus bandage. The patient is allowed to go home the day following operation, and is restricted very little in her activity. The preliminary dressing is usually done at the end of one week. Be careful to thoroughly soak the dressing in sterile water or normal salt solution before removing it.

It has been found by many surgeons that the transplanted nipple and areola does not become absorbed, or die, but continues as normal vascularized living tissue in the vast majority of cases. If, a few days following the transplantation of the nipple, the surface of the latter appears dark, or even black in color, the transplantation is not necessarily unsuccessful. On the contrary, in most cases, if not in all, where the technique has been faultless, and the post-operative care proper, the superficial, discolored layer, representing only the stratum corneum, exfoliates, while the cutis vera goes on to healing by primary union. It may take a few weeks for the stratum corneum to separate. A period of approximately two months is usually allowed before the second operation is performed.

The marking of the lines of incisions for the second operation is done the day previous to operation with the patient again in the standing position. The

lower incision is made directly in the fold of the breast. This is vitally necessary. As to how far this incision is extended outward and upward depends entirely upon the individual case.

One must use a keen sense of artistry as to where to place the upper incision, for it is extremely difficult to visualize how the breast will appear with the woman in the upright position when she is prone on the table. The upper incision is carried completely through all breast tissue, and the excess breast removed. Three or four towel clips are then placed along the upper skin edge and approximated to the lower skin edge. One then must judge how much fat and breast tissue must be removed to give a proper contour. When this has been accomplished, haemostasis must then be absolute.

The upper skin line is always longer than the lower. Three or four interrupted silk or cotton sutures, are first placed at either end of the wound. The exact center of both the upper and lower edges are then ascertained, and sutures placed accordingly. After three or four sutures are so placed in the center, the exact center of the outer and inner sides are again measured and sutured in a like manner. This method readily gives an accurate approximation.

Care must be taken that there is no dog-ear at the outer end of the incision. This can be prevented by carefully determining where the original incision should be placed, and if necessary, trimming away skin as needed to accomplish the desired result.

After one breast has been completed, one must be extremely careful to re-shape the second breast so that it will accurately match the other.

A dry, moderately firm gauze dressing is then applied, and again held in place with a scultetus bandage. The dressing must be so applied that the pressure will be evenly distributed over the entire breast.

There is a surprisingly small amount of pain or shock following the operation. All patients have been allowed up and about the following day.

The first dressing is usually done at the end of one week. Alternating sutures are usually removed at the first dressing. Sutures on the outer and under aspect should not be removed prior to ten days following the operation as there is apt to be a skin separation. The suture lines should be carefully inspected to ascertain if there is any area of fat liquefaction. If so, such areas must be promptly opened. So far, I have had none that caused serious or unsightly complications.

Fronk-Wynn Clinic, 1136 Union St.



# The Management of Occipitoposterior Positions

MAJOR ARTHUR M. FARIS, M.C., A.U.S.

During the past decade much information as to the cause of occipitoposterior positions has been gained by x-ray studies of the pelvis. Thomas was among the first to point out the relationship between the shape of the pelvic inlet and the position of the vertex. D'Esopo<sup>1</sup> believes that 90 per cent of the posterior positions may be accounted for on the basis of the anthropoid pelvis in which there is a narrowing of the forepelvis with an ample anteroposterior diameter. By engaging in the transverse or oblique posterior plane, the widest diameter of the head avoids the narrowest diameter of the pelvis.

The present trend is to consider this position as normal, contrary to the former teachings that it was distinctly pathological. Calkins<sup>2</sup> states that in his series of 780 such cases the length of labor and the operative incidence were not materially increased. While it is true that the majority will spontaneously rotate to an anterior position, most obstetricians are not in complete accord with his views. It is generally conceded that the morbidity and mortality for both the mother and baby are increased.

The entire subject of treatment cannot be covered in this brief space; therefore, the remarks will be confined to management when the head is engaged and anterior rotation fails to occur.

A lesser percentage of cases will rotate spontaneously to a direct posterior position. In these the pelvis is usually ample and I have found no contradictions to delivery as such, provided an adequate episiotomy is done to prevent severe lacerations.

The most common indications for operative interference are fetal and maternal distress, prolonged second stage and uterine inertia.

Numerous methods for dealing with persistent posterior positions have been advocated. To mention a few: Tarnier's maneuver, in which there was an attempt to rotate the head by upward pressure with the fingers behind the ear; Hodges' maneuver of upward pressure on the symphysis during pains; the use of manual rotation followed by forceps delivery; or the use of forceps as both the rotating and delivering agent.

Read before the Post Graduate Session of the Honolulu County Medical Society, January 11, 1945. Approved for publication. The opinions and views set forth in this article are those of the writer and are not to be considered as reflecting the policies of the War Department.

The method of choice, and one that is possible in the majority of cases, is to manually rotate the head to an anterior position and then apply forceps for delivery. The head is grasped and rotated to a position of overcorrection and without removing the fingers the posterior blade is inserted. In this manner the head is prevented from returning to its original site during the application. The posterior blade then maintains the position while the anterior one is applied.

If manual rotation is unsuccessful, forceps rotation must be done. This maneuver was first employed by Scanzoni in 1865. In the case of an R.O.P. the forceps are applied in the same manner as in an L.O.A. position. The head is then rotated by swinging the handles through a wide arc so that the apex of the blades will act as the axis of rotation. The handles should never be twisted in an effort to accomplish the desired position. In most instances it is necessary to push the head upward after the forceps are applied to avoid any pelvic obstruction which might have prevented spontaneous rotation at that level. In some instances the head can be brought downward and rotated in the lower forepelvis, depending on the bony contour of the pelvis. The forceps are then reapplied to the anterior position and the delivery completed.

In 1915 Kielland devised a forceps without pelvic curve with which the fetal head can be grasped regardless of the position in which it may lie. Only one application is necessary for rotation and delivery. Difficulty may be encountered in applying the anterior blade; therefore this method has not been as widely employed as the Scanzoni maneuver.

The usual methods of operative delivery may then be summarized in order of preference as: (1) Manual rotation; (2) Scanzoni's method of double forceps application; and (3) Kielland's method of single forceps rotation.

By careful examination of the pelvis during the prenatal period one can often anticipate the problems which may be encountered during labor. In doubtful cases x-ray studies of the pelvis should be done.

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## EDITORIALS

### GASTROSCOPY

Since the introduction of the modern flexible gastroscope by Rudolph Schindler in 1932, gastroscopy has become an increasingly valuable aid in the diagnosis and treatment of obvious and obscure lesions of the stomach. The indications and contraindications to the procedure, as well as its shortcomings, are now well recognized.

The preoperative preparation of the patient and technique of introduction, with minor variations, have been well standardized. Suffice it to say that the procedure may be carried out on anyone who is not moribund, except for a few definite contraindications. The esophagus must, of course, be patent. The presence of large esophageal varices are said to render the procedure highly dangerous. Marked kyphosis or arthritic ankylosis of the spine may prevent the introduction of the instrument. General debilitation and cardiac disease are not considered contraindications.

It is of course highly important, for a satisfactory examination, to obtain the fullest cooperation of the patient. Each step is carefully explained as the examination proceeds. This psychological preparation cannot be hurried, and most observers are amazed at the smoothness with which the operation is accomplished.

The value of a clear view of a cavity of the body cannot be overemphasized. With the modern instrument a view comparable to that of a cystoscope is possible in almost every case. Yet physicians as a whole have been slow to adopt this procedure. The reason for this reluctance is probably a carry-over from the unsatisfactory and often definitely dangerous era of the old type rigid instrument. There remains, however, even with flexible gastroscope, a definite risk to the procedure. In the hands of those especially trained, the risk is practically negligible. It must be remembered, however, that perforations of the esophagus and stomach do occasionally occur.

The greatest advantage of gastroscopy over other methods of examination of the stomach is that the mucosa is seen by direct vision. With the exception of a small portion of the lesser curvature of the antrum distal to the angulus, a small portion of the posterior wall upon which the instrument lies, and varying amounts of the extreme cardiac portion, the whole of the stomach can be seen.

It should be stated at the earliest opportunity that gastroscopy is not, by itself, a complete diagnostic procedure. It is an adjunct, and an adjunct only, to a careful and complete x-ray examination. It has been proved many times that either procedure alone may miss lesions easily demonstrated by a combination of the two. The author does not mean to infer that gastroscopy should be routinely used in the examination of all patients suspected of having disease of the stomach. Although the procedure is painless, it remains an uncomfortable ordeal to the patient, and one that must be reserved for special indications.

It is in the differential and early diagnosis of organic lesions of the stomach that gastroscopy has its greatest value. Under modern roentgenographic study there has been no appreciable lowering of the mortality rate from carcinoma. This is due to one thing only—diagnosis is not made early enough so that the lesion can be subjected to surgery in the operable state. One of the clearest indications for gastroscopy is the patient who is suffering from vague stomach disorders, with achlorhydria and with or without positive or suspicious x-ray findings.

Surgeons as a whole are viewing all gastric ulcers with increasing suspicion. The differentiation of a benign from a malignant ulcer by x-ray alone is not always easy. By the time a definite change has taken place the period of operability may well be passed. Very often the x-ray will give a false impression of healing, due to the fact that the crater has become filled with mucus and exudate. The gastroscope will

not only reveal this condition but also by direct view will show the infiltration, induration, and interference of motility brought on by neoplastic invasion. In the hands of experts, in known carcinomas, the gastro-scope can often be relied upon to determine operability with as great a degree of accuracy as can the surgeon during exploratory laparotomy. Lesions that have already infiltrated the stomach wall by local metastasis, or those involving very large areas, may well be spared a laparotomy. Benign tumors and polyps as a whole are easily seen and differentiated.

Perhaps the next greatest value of gastroscopy is in the diagnosis and treatment of the so-called gastric neurosis. Many are the patients who continue to complain of ulcer type pain, have negative x-ray findings, and are on an adequate ulcer regimen. The gastro-scope may reveal atrophic or hypertrophic mucosal changes, interference with motility, or even ulcers not demonstrable by x-rays. The psychological effects of a direct negative examination are obvious.

Often, in the postoperative stomach, x-ray examination is unsatisfactory. A great deal may be learned by direct visualization of the stoma and surrounding mucosa. Marginal ulcers are, as a rule, easily demonstrated. The gastro-scope also may show whether or not the artificial stoma has taken up the normal rhythm of a true pylorus; if not, poor function will persist until corrected.

This is merely a summary of some of the facts concerning gastroscopy. It is a safe procedure of proved value that gives information obtainable in no other way. It should be stressed again that gastro-scopy has its greatest value when combined with a careful clinical and x-ray examination. The appearance of a disease noted in the gastric mucosa must be correlated and evaluated with the clinical picture of the patient as a whole. It is hoped that the more frequent use of the gastro-scope may help to lower the mortality in the almost hopeless disease of cancer of the stomach.

C. M. BURGESS, M.D.

#### BOOK REVIEW

*Men Under Stress*, by Lt. Col. Roy Grinker and Major John Spiegel. Philadelphia, The Blakiston Co., 1945.

This book grew out of the authors' extensive experience with psychiatric problems in the ground and air forces in the European Theater of Operations. It is interesting, comprehensive, and so well written as to make the various reactions understandable. Prevention, treatment and after-care stem naturally from this understanding. The dynamic nature of maladjustment is repeatedly demonstrated. There

is no longer any place for the concept of "weakness" in those who cannot satisfactorily absorb and organize all the stresses upon them in war.

"Narco-synthesis"—a form of treatment used extensively by the authors in many cases—is well presented. This form of therapy probably represents a technical advance attributable more or less directly to the war situations.

WILLIAM F. SHANAHAN, M.D.

#### PREMARITAL EXAMINATION FOR SYPHILIS

On and after July 1, 1945 every person marrying in the Territory of Hawaii must obtain a medical examination for syphilis including an approved blood test. The examination and blood test must be made within a period of thirty days immediately prior to the first day on which such license may be issued.

##### Procedure of Examination

1. The applicant for marriage consults a licensed physician or commissioned medical officer of the U.S. Army, Navy, or Public Health Service for an examination and blood test.
2. The physician sends a specimen of blood to an approved private laboratory or the Board of Health laboratory. *The physician does not fill out any form at this time.* It is extremely important, however, that the specimen be labelled or checked "*premarital blood test*", as the laboratory issues the certificate form only for specimens so identified.
3. The laboratory examines the specimen and initiates the "Premarital Health Certificate." The upper portion of the certificate is filled in by the laboratory and it is then sent to the physician along with a copy of the laboratory report.
4. After examining the applicant for evidence of syphilis and inspecting the laboratory report, if there is no evidence of infectious syphilis *the physician completes the certificate by dating and signing it*, and gives it to the applicant.

5. The applicant signs the certificate and presents it to the license agent when applying for a license to marry.

#### POST-WAR HEALTH PLANS

The Post-war Planning Committee for Health, formerly a branch, under Dr. C. L. Wilbar, of the Chamber of Commerce's Post-war Planning Committee for Human Welfare, is about to be absorbed into the Public Health Committee of the Chamber of



Commerce, under the direction of Dr. Raymond Nebelung. On the occasion of this transfer, which is occurring after between six months and a year of activity of the various groups, Dr. Wilbar presented to Mr. Arthur Eyles a preliminary report of the findings of the committees. These are embodied in thirty-four pages, and are much too voluminous to reprint in detail.

There are 18 committees, of which all except 8 (those on Health Aspects of Social Hygiene, School Health, Maternal and Child Health, Mental Hygiene, Statistics and Biometrics, Industrial Health, Community Education, and Nursing Services) have arrived at some preliminary or final conclusions. Of the 22 subcommittees, 11 have not as yet arrived at any conclusions: these are the subcommittees on Hospital Services, Clinical Laboratory Services, Dental Services, Leprosy, Other Communicable Diseases, Chronic Diseases, Maternal Health, Child Health, Sewage Disposal, Garbage Disposal, and Meat Control.

A summary of the reports, with the title and chairman of each reporting group, follows:

COMMITTEE AND CHAIRMAN	RECOMMENDATIONS
Hospital Beds HARRY P. FIELD	Tuberculosis sanatoria should be centrally controlled. The Johnson-Onstott reports are endorsed.
Clinics DR. J. W. LAM	Palama Clinic should eventually become part of one or more hospitals. The Chamber of Commerce should study the post-war need for out-patient facilities in our hospitals.
Medical Treatment Services WM. P. CRANDALL	
(Medical Services) DR. A. S. PRICE	The proposal and supervision of any Basic Science Law should be the responsibility of the University of Hawaii. The one-year residence clause should not be altered at present. Fellowships and internships on the Mainland should be fostered for men planning to practice here. Doctors wishing to practice here should be required to have had 2 or more years of premedical study, graduation from a class A medical school, and 1 year's (or, for the duration, 9 months') internship.
(Occupational Therapy) MRS. L. M. DOWSETT	A system of licensure of occupational therapists is needed here. The present volunteer training program of such persons should be continued.

COMMITTEE AND CHAIRMAN	RECOMMENDATIONS
	One therapist can run a department in 2 or 3 small hospitals, with help. Locally available occupational therapy supplies should be used when feasible. A central headquarters and fund for obtaining and distributing occupational therapy supplies would be desirable.
(Physiotherapy) RUTH AUST	A permit to practice physiotherapy should be required in the Territory ( <i>this is now law</i> ).
Communicable Diseases DR. A. V. MOLYNEUX	
(Venereal Diseases) DR. SAMUEL ALLISON	The Health Department should have a separate Bureau covering preventive medicine, communicable diseases, tuberculosis, and venereal diseases. Treatment for "VD" should be available to all. Hospitalization of "VD" cases should be freely permitted. Outpatient treatment for "VD" must be continued, at Palama or elsewhere. Supervised free provision of antisyphilitic drugs should be continued. All contacts and delinquent cases should be followed up, examined, returned to treatment if necessary. Extensive serologic surveys are recommended. Premarital blood tests are recommended ( <i>this is now law</i> ). Free "VD" laboratory service should be continued. "VD" education should be continued. Prophylactic stations should continue to be operated by the Army. Universal reporting of all "VD" contacts should be continued.
(Tuberculosis) DR. H. H. WALKER	Leahi Hospital should immediately be expanded to about 950 beds. Centralized control of Territorial tuberculosis sanatoria should be vested in a committee responsible to the Board of Health.
Nutrition MARJORIE ABEL	The Territory needs a coordinating committee for nutrition. Each county needs a Board of Health nutritionist. Each large industry needs its own nutritionist. The Dept. of Public Welfare needs a nutritionist. The Dept. of Public Instruction needs several nutritionists. The Dept. of Institutions needs a food supervisor. The Hawaii Teachers' College should require one semester of dietetics. The University of Hawaii should offer a summer school course in public health nutrition, and social workers should be required to take it. Flour in Hawaii should be enriched ( <i>this is now law</i> ).

COMMITTEE  
AND CHAIRMAN

## RECOMMENDATIONS

## Sanitation

B. J. McMORROW

(Pure Foods and Drugs)

GEORGE AKAU

Food inspection should be a Board of Health function (*this is now law*).

Peddlers of food or food products should obtain Board of Health permits (*this is now law*).

Food, drug and cosmetic manufacturers should be required to hold Board of Health permits.

(Rodent Control)

KAARLO W. NASI

Rodent control should be expanded and better financed (*done by 1945 Legislature*).

Rodent control education is needed, including high school instruction in it.

Honolulu and Hilo garbage disposal and rat-proofing need to be improved.

The USPHS should be on guard against importation of rodents into the Territory.

(Mosquito Control)

ARVE H. DAHL

A Board of Health Division should be created to supervise this field.

\$168,000 should be spent on it in the next 2 years (*authorized by 1945 Legislature*).

Control requires premise to premise inspection, education, a complaint service, special spraying and fish-planting where needed, survey of airport areas, coordination with military control efforts, and a permanent staff which can be rapidly expanded in case of a mosquito-borne epidemic.

High-schools should teach mosquito control.

(Milk Control)

DR. W. B. HERTER

The USPHS Milk Code and Ordinance should be adopted here (*this is now law*).

All Honolulu (and perhaps all Territorial) milk should be pasteurized.

(Parasitology)

J. E. ALICATA

The Board of Health should establish and maintain a parasitological research laboratory.

The Board of Health should question physicians regarding parasite-caused diseases.

(Water Control)

L. H. HERSHLER

The Territory should purchase 12,000 acres of watershed land to prevent its private development.

COMMITTEE  
AND CHAIRMAN

## RECOMMENDATIONS

The sewerage program of the City and County is endorsed.

The next 10 years will see the need of an added 20,000,000 gallons of water a day for suburban residents.

(Healthful Housing)

F. A. SCHRAMM

13,500 new units currently needed, and 2,000 more each year.

Present slum clearance program not needed now.

Land utilization program of Honolulu Planning Commission should be encouraged.

Sewerage extensions and other municipal facilities should be available before building is allowed.

Building codes should be revised to conform to local conditions.

A trained public health engineer should be made available to help supervise the housing problem.

Requisitioning of civilian building materials by the military should be at a minimum.

Public Health Administration

DR. R. H. ONSTOTT

This committee will confine itself to recommendations regarding laws, regulations, and health organizations.

Professional Health Education

GREGG M. SINCLAIR

Boards of Examiners in all the healing arts should file their questions and their results with the Board of Health.

Such Boards should be made more nearly uniform.

National Boards should be accepted as standard requirements for qualification of specialists.

University of Hawaii should train sanitary inspectors.

Pan Pacific and other international meetings of those engaged in healing arts should be encouraged, and held at the University of Hawaii when feasible.

The University should train persons in Physical Education and Recreation.

The University is commended for offering training in Nursing, Medical Technology, and Bacteriology.

The foregoing material represents an enormous amount of constructive thought and discussion and work by the members of the committees. The committees and subcommittees which have not yet reported have in many instances done a great deal of work, and their reports will no doubt be ready later on. The whole program is an altogether admirable one, and a great deal of good may be expected to come of it.

# CLINICO-PATHOLOGIC COMMENT

## EVALUATION OF LABORATORIES APPROVED TO CONDUCT PRENATAL AND PREMARITAL SEROLOGIC TESTS FOR SYPHILIS, JUNE, 1945

Thirty-two laboratories, including those of the Board of Health, expressed their desire to participate in the serologic evaluation held on June 5, 1945. Through the cooperation of the Territorial Hospital for the Mentally Ill, blood specimens were obtained from 5 individuals with varied serologic pictures. A portion of one of these specimens (#2) was diluted with pooled negative sera 1:15, 1:8, 1:4, 1:2 and 1:1. These dilutions respectively were used as specimens #6 to #10. While 10 specimens may not be considered sufficient to gauge the sensitivity and specificity of serologic results, it was felt that these, with subsequent evaluations at frequent intervals, would meet the practical needs of the community satisfactorily. Identical specimens were submitted to all the participating laboratories under code numbers. Each laboratory was given an identifying number by means of which it could compare its findings with the results of the other participants, whose identities were also concealed by identifying numbers.

One complement-fixation test, the Kolmer, and 3 standard flocculation tests, the Kahn, Kline, and Eagle, were performed by the participating laboratories.

Twenty-eight of the 32 laboratories taking part performed Kahn tests. Seven did the Kahn test alone, 14 the Kahn in conjunction with Kolmers, 3 the Kahn with Klines and 5 did Kahns with Eagles. Thirteen laboratories performed Kolmer tests, all of them along with one or more flocculation tests.

This was an evaluation of laboratories and not of the specificity or sensitivity of any given serologic test for syphilis. Only one serum specimen (#4) was from a normal donor. Specimens 1, 2, 3 and 5 came from treated cases of syphilis with varied reagin titers. Specimen 2 was diluted in the previously mentioned proportions with pooled negative serum to provide specimens 6, 7, 8, 9 and 10.

One of the 28 laboratories performing Kahn tests reported unsatisfactory readings. A check with this laboratory revealed that the technician was inactivating blood sera at 37° C. instead of 56° C. and incubating at 56° C. Because of this error, the technician had been reporting all "positive" blood specimens as "negative." Three laboratories reported low readings. Three laboratories failed to interpret the

results of their Kahn tests properly for one or more of the specimens. The interpretation of Kahn tests was guided by U. S. Public Health Service Supplement No. 9 to Venereal Disease Information, 1939 (pages 190-191). "A total of 6 pluses to 12 pluses on the three tubes be reported Positive. A total of 2½ pluses to 5 pluses on the three tubes be reported Doubtful. A total of 2 pluses or less be reported Negative."

Two of the thirteen laboratories performing Kolmer complement-fixation tests showed high sensitivity.

Two of the nine laboratories performing Eagle tests reported positive specimens as negative.

The three laboratories conducting Kline tests were in full agreement.

The results of this evaluation test revealed that with the exception of a few laboratories, the serologic work performed by the laboratories throughout the Territory of Hawaii continues to be of high quality. The degree of uniformity among the majority of the laboratories evaluated represents the upper limit attainable with the technical methods now available.

On the basis of the results of the aforementioned evaluation, the following 31 laboratories have been approved by the Board of Health to conduct prenatal and premarital serologic tests for syphilis during the current fiscal year:

### OAHU

Ewa Plantation Hospital Laboratory  
Dr. Pinkerton's Laboratory  
Honolulu Peacetime Blood Plasma Bank Laboratory  
Queen's Hospital Laboratory  
Kuakini Hospital Laboratory  
Alsup Clinic Laboratory  
Leahi Hospital Laboratory  
Fronk-Wynn Clinic Laboratory  
Drs. Batten & Bell Laboratory  
St. Francis Hospital Laboratory  
City & County Emergency Hospital Laboratory  
Drs. Culpepper & Bailey Laboratory  
Kahuku Hospital Laboratory  
The Clinic Laboratory  
The Medical Group Laboratory  
Kapiolani Maternity & Gynecological Hospital Laboratory  
Board of Health Laboratory, Honolulu

### HAWAII

Hilo Memorial Hospital Laboratory  
Puumaile Hospital Laboratory  
Board of Health Laboratory, Hilo



## MAUI

Kula Sanatorium Laboratory  
 Malulani Hospital Laboratory  
 Puunene Hospital Laboratory  
 Paia Hospital Laboratory  
 Wailuku Board of Health Laboratory  
 Pioneer Mill Hospital Laboratory

## KAUAI

Samuel Mahelona Hospital Laboratory  
 Kauai Medical Society Laboratory  
 Board of Health Laboratory, Kauai

## MOLOKAI

Shingle Memorial Hospital Laboratory  
 Board of Health Laboratory, Molokai

In addition to the laboratories listed above, the laboratories of the Army, Navy and Public Health Service are acceptable, for legally required serologic tests for syphilis.

BERNARD WITLIN, ScD.\*

\*Bacteriologist, U. S. Public Health Service, States' Relations Division assigned to the Board of Health, Territory of Hawaii as Acting Director, Bacteriological Laboratories.

*Uniform  
Satisfaction*

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**BENZESTROL**  
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Clinicians agree that Schieffelin BENZESTROL is a significant contribution to therapy in that it is both estrogenically effective and singularly well tolerated, whether administered orally or parenterally.

*"In our hands it has proved to be an effective estrogen when administered either orally or parenterally and much less toxic than diethylstilbestrol at the therapeutic levels". (Talisman, M. R.—Am. Jour. Obstet. & Gynec. 46, 534, 1943)*

*"During the last two years I have used the new synthetic estrogen Benzestrol in patients in whom estrogenic therapy was indicated. The results have been uniformly satisfactory". (Jaeger, A. S. Journal Indiana State Med. Assn. 37, 117, 1944)*

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*Literature and Sample on Request*

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# NEUROPSYCHIATRIC COMMENT

## THE PROPOSED NEUROPSYCHIATRIC INSTITUTE BILL (H.R. 2550)

H. R. 2550 was presented to the Congress of the United States on March 9, 1945, by Representative J. Percy Priest of Tennessee. It is endorsed wholeheartedly by the National Committee for Mental Hygiene, and is receiving support from the American Psychiatric Association. It is intended to supply the demand for a program of proportions far beyond the range of private initiative and finance.

The bill for the first time expresses Federal interest, commensurate with the size of the problem, in the advancement of knowledge of mental illness.

It offers a needed outside lift to states and communities in their efforts to make progress in their campaign against mental illness. States and communities will be helped in providing clinic facilities on a broader scale.

It promises a significant advance in overcoming geographical isolation, haphazard training of personnel, half-hearted research, and meager financial support which have in the past always handicapped any movement for national mental health.

H. R. 2550 provides for the appropriation of a sum of \$10,000,000 each fiscal year to establish a *National Neuropsychiatric Institute* under the Surgeon General of the United States Public Health Service. This institute would include a research center at Bethesda, Maryland, where it could enjoy the laboratory and other research facilities of that location. It also provides for a *National Advisory Council* consisting of the Surgeon General and six members appointed by him from leading medical or scientific authorities outstanding in the study, diagnosis, or treatment of neuropsychiatric disorders.

In carrying out the purposes of H. R. 2550, the Surgeon General is authorized through the Institute to:

(a) conduct, assist, and foster researches, investigations, experiments, and demonstrations relating to the cause, prevention, and methods of diagnosis and treatment of neuropsychiatric disorders;

(b) promote the coordination of researches conducted by the Institute, and similar researches conducted by other agencies, organizations, and individuals;

(c) make available research facilities of the Service to appropriate public authorities, and to health officials and scientists engaged in special studies related to the purposes of this Act;

(d) make grants-in-aid to universities, hospitals, laboratories, and other public or private institutions, and to individuals for such research projects as are recommended by the National Advisory Mental Health Council;

(e) for purposes of study, admit and treat, at the Institute, voluntary patients;

(f) collect and make available through publications and other appropriate means, information as to, and the practical application of, research and other activities carried on pursuant to this Act;

(g) secure from time to time, and for such periods as he deems advisable, the assistance and advice of persons from the United States or abroad, who are experts in the field of neuropsychiatric disorders;

(h) establish and maintain fellowships in the Institute;

(i) (1) provide training and instruction in matters relating to the diagnosis, prevention, and treatment of neuropsychiatric disorders, (2) provide the necessary facilities where such training and instruction may be given to persons found by the Surgeon General to have proper qualifications; and

(j) assist, through grants, demonstrations, and as otherwise provided in this Act, States, counties, health districts, and other political subdivisions of the States and non-profit agencies in establishing and maintaining adequate measures for the prevention, treatment, and control of neuropsychiatric disorders, including training and instruction of personnel in subjects related to neuropsychiatry, and the provision of necessary facilities for such training and instruction.

The National Advisory Mental Health Council is authorized:

(a) to review research projects or programs submitted to or initiated by it relating to the study of the cause, prevention, or methods of diagnosis and treatment of neuropsychiatric disorders, and to recommend to the Surgeon General, for prosecution under section 3 of this Act, any such projects which it believes show promise of making valuable contributions to human knowledge with respect to the cause, prevention, or methods of diagnosis and treatment of neuropsychiatric disorders;

(b) to collect information as to studies which are being carried on in the United States or any other country as to the cause, prevention, and methods of diagnosis and treatment of neuropsychiatric disorders, by correspondence or by personal investigation of such studies, and with the approval of the Surgeon General make available such information through the appropriate publications for the benefit of health and welfare agencies and organizations (public or private), physicians, or any other scientists, and for the information of the general public;

(c) to review applications from any university, hospital, laboratory, or other institution or agency, whether public or private or from individuals, for

grants-in-aid for research and demonstration projects relating to neuropsychiatric disorders, and certify to the Surgeon General its approval of grants-in-aid in the cases of such projects which show promise of making valuable contributions to human knowledge with respect to the cause, prevention, or methods of diagnosis or treatment of neuropsychiatric disorders;

(d) to review applications from any public or other non-profit institution for grants-in-aid for training and instruction in matters relating to the diagnosis, prevention, and treatment of neuropsychiatric disorders, and certify to the Surgeon General its approval of such applications as it determines will best carry out the purposes of this Act;

(e) to recommend to the Surgeon General for acceptance conditional gifts pursuant to section 501 of the Public Health Service Act for carrying out the purposes of this Act; and

(f) to make recommendations to the Surgeon General with respect to carrying out the provisions of this Act.

There is no question but that the intent of this Bill is good. The chief objections have been to the proposed channels of administration and control. There are those of us who feel that the government is already practicing entirely too much medicine, and that this would put the Public Health Service a bit further along the road toward eventual domination of the medical scene.

The added objection has been raised that the channeling of grants through state health departments and through mental hospitals is not necessarily an ideal procedure. State hospitals and health departments have been treating mental patients for many years, and there is certainly little evidence to show that, on the whole, their medicine is superior to that of private institutions. Until such evidence is presented many of us are opposed to any legislation which will throw greater control to the states (which include Hawaii and Porto Rico under the terms of this bill).

We feel that the bill should therefore make grants directly to the institutions or individuals concerned—at least in Hawaii—rather than through state agencies. We believe that otherwise the bill might prove detrimental rather than beneficial to the mental health situation by turning control of the administration of funds over to a Territorial agency to the possible exclusion of worthy agencies and individuals who are not connected with the government in some fashion.

By and large, however, the proposed bill seems sound and worthy of support, with reservations as to the mode of administration and channeling of grants and funds.

R. D. KEPNER, M.D.

405 Dillingham Bldg.





# COUNTY SOCIETY REPORTS

## HONOLULU COUNTY MEDICAL SOCIETY

The annual meeting of the Honolulu County Medical Society was held in the Mabel Smyth Auditorium on Friday, April 6, 1945. The annual reports were read and approved. Due to the uncertainty as to which doctors will remain in civilian practice during the coming year, it was voted to postpone the annual election of officers for at least sixty days. Delegates were elected for the annual meeting of the Hawaii Territorial Medical Association.

The Honolulu County Medical Society omitted its May meeting because of the annual meeting of the Hawaii Territorial Medical Association held in Honolulu from May 3 to 6, 1945.

The Honolulu County Medical Society met in the Mabel Smyth Auditorium on Friday, June 15, 1945. Dr. Halford presided. There were 50 present.

The program was as follows:

*Traumatic Perforation of the Gall Bladder*, R. L. Hill, M.D.

*History of Gall Bladder Surgery in Hawaii*, J. R. Judd, M.D.

*X-Ray Diagnosis of Gall Bladder Disease*, Lt. Col. L. M. Garrett, M.C., A.U.S.

*Common Duct Stone: Case Report*, C. E. Fronk, M.D.

Dr. Halford announced that at the last meeting of the Board of Governors it was voted to continue giving all pre-school children physical examinations, raising the fee to three dollars, and urging the parents, through the newspapers and various means of advertising, to take their children into the doctors' offices early in the summer.

M. GORDON, M.D.,  
Secretary

## HAWAII COUNTY MEDICAL SOCIETY

The 237th meeting of the Hawaii County Medical Society was called to order by Dr. R. Eklund, president, in the staff room of the Hilo Memorial Hospital at 7:10 P.M. on April 7, 1945. 19 members and 1 guest were present.

Minutes of the previous meeting were read, accepted and placed on file.

Dr. H. Crawford gave a report of his recent trip to the Mainland. He reviewed some of the work being done in orthoptics, cataract and harelip surgery.

Dr. Eklund read a communication from Dr. Cloward, chairman of the scientific committee for the Territorial Medical Association meeting to be held May 3 to 6 at the Mabel L. Smyth Memorial Building. Contrary to the years following the outbreak of the present war, a request was made for more civilian doctors to participate in the scientific program rather than chiefly army and navy as heretofore. Papers may be read by title before the meeting in absentia and later published in the JOURNAL.

Dr. H. Sexton's resignation as chairman of the Library Committee was accepted and the chair appointed to that committee:

Dr. Loo, chairman

Dr. Crawford, for two years

Dr. C. B. Brown, for three years.

After a full discussion of the Medical Library, it was moved by Dr. H. Patterson and seconded by Dr. M. L. Chang that a sum of \$300 be allocated from our treasury to be used at the discretion of the Library Committee.

Dr. Eklund commended the Territorial Legislative Committee, headed by Dr. R. O. Brown, for keeping us informed as to what is transpiring at the present legislature. This was conveyed to Dr. Brown.

The chair appointed Dr. A. Orenstein for two years and Dr. M. H. Chang for three years on our Legislative Committee. It was noted with satisfaction that the status of the Managing Board of the Hilo Memorial Hospital has been settled as we wished. The Managing Board is to be composed entirely of laymen.

Dr. W. Loo quoted Dr. Shanahan as saying that the society should take some action in regard to a bill introduced in the Senate through the efforts particularly of two local herbalists, Jones and Kim, to grant herbalists and naturopaths the right to diagnose and treat diseases and to dispense all drugs, including opium derivatives. Dr. Phillips moved that the secretary inform the Territorial Legislative Committee that our society is against the bill. Seconded by Dr. Loo and passed.

Dr. C. Phillips wanted to know the result of the recent meeting of the Procurement and Assignment Service in Honolulu. Our representative, Dr. Carter, being absent, no information was forthcoming. Dr. Eklund volunteered to obtain some information for the next meeting. It was remarked by Dr. I. Larsen that all Caucasian doctors in Honolulu below the age of 45 were ordered to apply for commissions and to appear for physicals. Locally Dr. H. Sexton is now awaiting his commission and several others have received their availability notices.

It was tentatively decided that our next Hawaii Medical meeting would be held on Thursday, May 10, 1945, so that we may hear from our delegates to the Territorial Medical meeting.

The question of membership in our society for those going into the armed forces was discussed. It was suggested by Dr. Patterson that they be Honorary Members, or if the individuals desired they might be Service Members and pay annual dues of only \$5.00. The delegates to the Territorial Medical meeting were advised to pursue this question still further at the coming meeting.

It was decided to obtain stationery for this Society.

Dr. H. Patterson suggested that the Society send a letter of thanks to Dr. Orenstein for his efficient medical management of the O.C.D. The secretary was so instructed.

A letter from the National Association of Medical and Dental Bureaus was read. As little information was known of said association, the secretary was instructed to contact Huff Collecting Agency and report findings at the next meeting.

A portion of the minutes of the Honolulu County Medical Society was read, indicating that there is a move afoot to make hospital insurance mandatory.

Mr. Edwards and Mr. McKetrick of the Singer Sewing Machine Co. presented a motion picture on the use of the Singer surgical stitching machine, plus its illustrative use in actual hernioplasty. A display of the stitching machine and various types of needles was on display also for examination.

Meeting adjourned at 9:25 P.M.

S. MIZUIRE, M.D.,  
Secretary

The 238th monthly meeting of the Hawaii County Medical Society was called to order by Dr. R. Eklund in the Hilo Memorial Hospital Staff Room at 7:15 P.M. May 10, 1945. 16 members and 2 guests were present. In the absence of Dr. S. Mizuire, Dr. Yoshina was asked to act as the secretary. The minutes of the previous meeting were read, approved and placed on file.

Dr. Eklund introduced Dr. H.M. Johnson, dermatologist from Honolulu, who was invited to Hawaii County Plantation Physicians' Association to start a dermatology clinic for them. Dr. Johnson gave an illustrated talk on the common dermatologic conditions encountered in daily practice.

A communication from Dr. R. O. Brown, Chairman of the Committee on Public Policy and Legislation relating to H.B. No. 80 and S.B. No. 296 was read.

A circular letter from Kape R. Putnam, Acting Secretary of the Board of Health, announcing the issuance of license to practice medicine and surgery to Charlotte M. Florine, M.D., was read.

The matter of transporting mental cases to Honolulu by plane was brought up. Dr. Eklund was informed verbally by the local representative of the Hawaiian Airlines, Ltd., that the company reserves the right to reject any patient who in its opinion will jeopardize the comfort of the other patrons, notwithstanding a doctor's certification as to his safety as a passenger. The opinion expressed by various men present was that mental patients could be sent by boats now with the improved shipping schedule and further action was not necessary at this time. The secretary was instructed to write Dr. Shanahan on this matter.

The Chair announced that 3 copies of "Mental Health vs. Money Rehabilitation" by C. C. Burlingame, M.D., were sent by Dr. Richard Kepner and any members wishing to read them may obtain copy from him.

Dr. Patterson reported on the meetings of the Territorial Medical Association. He stated that the time allotted to each paper was too short and suggested that improvement could be made by presenting fewer papers and giving more time to each. He briefly touched on the Medical Advisory Committee meetings to the Bureau of Maternal and Child Health and the Crippled Children Service of the Board of Health. When he mentioned the EMIC program, various members voiced dissatisfaction with this set-up of medical practice. Some of the criticisms were: added clerical work and lengthy correspondence with the Honolulu office before receiving remuneration for services rendered.

Dr. Phillips stated that Dr. Seymour of Holualoa was approached by the Kona Lions Club concerning information on the Hawaii Medical Service Association. Since this society reacted favorably to HMSA in the past, Dr. Phillips moved that Mr. Carter of the HMSA be invited to come here and meet with the doctors and the citizens and discuss this health insurance plan. This was seconded by Dr. Larsen and carried. Meeting adjourned at 9:40 P.M.

The 239th regular monthly meeting of the Hawaii County Medical Society was called to order by Dr. William Leslie in the absence of Dr. R. Eklund, in

the Hilo Memorial Hospital Staff Room, at 7:15 P.M., June 7, 1945. Dr. T. Yoshina acted as secretary in the absence of Dr. S. Mizuire. 16 members and 3 guests were present. The minutes of the last meeting were accepted as read.

Instead of the secretary reading a letter from Mr. W. Tate Robinson, Director of Health Education of the Department of Public Instruction, who was concerned about the effect of physician shortage on the physical examination of first grade and kindergarten children, Dr. H. M. Patterson reported on the recommendations made by the Medical Advisory Committee to the Bureau of Maternal and Child Health of the Board of Health which met a month ago in Honolulu. In essence the committee recommended that in urban areas, Hilo and Honolulu, physical examination be made in the doctor's office as in the past, and in the rural areas the manner of examination be left to the discretion of the individual physician to suit the time available for such examination; the examination be done either during the summer in groups or individually or a mass examination at the opening of school; a booster shot of diphtheria toxoid in the form of combined diphtheria-tetanus toxoid be given at the time of examination; and the second dose of the combined toxoid, while highly recommended, is not to be mandatory.

In regard to the EMIC program the Chair announced that according to a communication received from Dr. S. M. Wishik any infant whose mother has been approved for medical care under this program does not require a new approval from the Honolulu office. The local public health nursing office maintains a list of names of mothers approved under this program.

In regard to the mental cases several points of interest which arose since the last meeting were mentioned by Dr. A. Orenstein. He stated 1) that the Hilo Memorial Hospital will not admit any mental patient unless a commitment paper accompanies him; 2) that in a case of indigent parolee of the Territorial Hospital seeking readmission to the Territorial Hospital; it appears that neither the county nor the Territorial Hospital will assume the responsibility of transportation expenses. A ruling by the Attorney General to decide whose responsibility it is seems necessary.

Dr. Leslie introduced Dr. C. M. Burgess, a visitor from Honolulu, to the Society.

Dr. Leslie reported that the tuberculosis x-ray survey will start in July. At the same time the Board of Health will take blood for serology tests. The itinerary is to start at Kohala, then go to Olaa and around the island, and finally to end in the City of Hilo.

The scientific program consisted of case reports or case presentation by various members:

1. *Arteriorrhaphy* by Dr. L. L. Sexton;
2. *A case of acrocyanosis or cold purpura* by Dr. S. R. Brown;
3. *Poliomyelitis with paralysis involving intestine and bladder* by Dr. A. Orenstein;
4. *Delivery of 18 lbs. 13 ozs. dead fetus by cesarean section in a woman weighing 265 lbs.* by Dr. I. V. Larsen;
5. *A 220 lbs. Hawaiian female at 8 month pregnancy with large thyroid glands and blood pressure of 165/110 who shows on x-ray film either an unusually large fetus or a possible monster* by Dr. Evelyn Ross.

Much discussion followed each case.

A discussion on Hawaii Medical Service Association was revived by some of the members who were absent at the last meeting. It was suggested that physicians back up the health insurance program of the HMSA before Federal medicine makes its appearance. For this reason, various members showed much interest and were enthusiastic to help HMSA get started on this island.

Dr. L. L. Sexton reported on the proceedings of the meeting of the Council of the Territorial Medical Association which took place on May 4, 1945 in Honolulu.

Dr. Orenstein brought up the question of whether the medical library at the Mabel Smyth Memorial Building in Honolulu belongs to the Honolulu County Medical Society or to the Hawaii Territorial Medical Association. In spite of the fact that the library has given excellent service to the outer island medical societies and physicians, if the library belongs to the Honolulu County Medical Society, the donation of \$500 by the Council of the Territorial Medical Association would appear to favor only one county society library.

The meeting adjourned at 8:40 P.M.

TERUO YOSHINA, M.D.,  
Acting Secretary

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#### KAUAI COUNTY MEDICAL SOCIETY

Meeting of the Kauai County Medical Society was called to order by Dr. Umaki, president, on Wednesday, May 9, 1945, at 7:15 P.M.

Members present: Drs. Umaki, Chisholm, Wallis, Kuhns, Chang, Liu, Waterhouse, Harl, Masunaga, Harris; Guest—Mr. Herbert Kum.

Minutes of the previous meeting were read and approved. Minutes of the call meeting were read and revised.



The Committee's report on the Convalescent Home was read. Outline, providing a working basis for securing action on this particular project, was presented.

Mr. Kum of the Honolulu Dept. of Public Welfare talked briefly concerning the proposed convalescent home on Kauai and pointed out pertinent data which must be considered when caring for indigents. He also stressed that the Dept. of Public Welfare will financially aid in supporting the so-called patients but will not operate or establish a convalescent home. The Welfare will supplement the difference in order to care for pensioned plantation cases and will take the word of the attending physician of such home in regard to admissions and discharges.

Dr. Wallis stated that in his talk with Dr. Mossman of Honolulu concerning the Convalescent Home on Kauai, he suggested that the Home be sponsored by some individual or an appropriate group other than the Medical Society. Dr. Wallis suggested that Kauai Sugar Planters Association could be named as a possible sponsor.

In regard to the blood plasma of the Kauai Blood Bank, Dr. Pinkerton advised that it be disposed. Dr. Wallis made a motion that Dr. Liu close the Blood Bank; seconded by Dr. Kuhns and passed. Dr. Wallis made a motion that Dr. Liu ask Mr. Fern to trans-

fer the OCD's master file of blood donors to the Wilcox Hospital; seconded by Dr. Kuhns.

Dr. Wallis, council member, made the following report on the annual territorial meeting:

1. Read the Committee's report of the Bureau of Crippled Children.
2. Report of the Advisory Committee of the Maternal and Child Health.
3. Distributed copies of the doctor's fee schedule and stated that the council meeting discuss fee schedule with reference to x-ray charges and suggested that if prices were too low for the outside islands the insurance carriers should be contacted.
4. Mr. Carter will send his representative of the HMSA in the near future. American Factors' plantations will not support the plan.

Dr. Wilbar's letter, concerning the territorial law providing for care of mentally disturbed patients, was read. Dr. Wallis made a motion that this law be brought to the attention of the Board of Supervisors by the Committee; seconded by Dr. Chisholm and passed.

Meeting adjourned 9:20 P.M.

H. W. HARRIS, M.D.,  
*Secretary*



# NOTES AND NEWS

## NEW INTERNES AT THE QUEEN'S HOSPITAL

The interne staff of The Queen's Hospital has been bolstered recently by the addition of five new members. DR. CLAUDE VERNON CAVER, whose home is in Dallas, Texas, graduated from the University of Texas Medical School before coming to Hawaii in June. DR. JAMES THOMAS HEARIN took his M.D. from the University of Oklahoma after acquiring an M.S. from The Johns Hopkins University. DR. DONALD HERBERT ROBINSON came to the Islands for the first time in July, having graduated from the Hahnemann Medical School in Philadelphia. DR. ROBINSON's home is in Elkins Park, Pennsylvania. DR. ROBERT CRAIG, the son of DR. A. L. CRAIG, has completed his education (begun at Punahou and Dartmouth) with an M.D. from Temple University. DR. CRAIG was married shortly before his return to Honolulu; Mrs. Craig was Rita Knight, of Akron, Ohio. DR. JAMES GRANT MARNIE, a Maui High School graduate, and a graduate of the University of Oregon, received his M.D. from Jefferson Medical College before returning to Hawaii for internship and eventual practice. DR. MARNIE was last here in the summer of 1944, when he flew back for a vacation as a private first class in the A.S.T.P. program.

## PERSONALS

DRS. ROGERS LEE HILL and JOHN FELIX accepted commissions in the Medical Corps, United States Naval Reserve, in July. LIEUTENANT COMMANDER HILL is on duty temporarily at the Aiea Naval Hospital, and LIEUTENANT (JG) FELIX has not yet reported for duty at this writing.

LT. COLONEL JOSEPH E. WALTHER, M.C., A.U.S., formerly physician at the McBryde Sugar Co., Elele, Kauai, has recently been awarded the Bronze Star Medal for research serving the Mustang fighter pilots now striking the Japanese mainland from Iwo Jima. COLONEL WALTHER holds the Air Medal and the Silver Star for work in air medicine, and the Soldier's Medal for aiding in the rescue of the crew of a burning airplane. The citation accompanying this newest decoration says COLONEL WALTHER made "a thorough study of the unusual physiological and psychological problems involved" in the 1500-mile over-water attacks on Japan's empire islands.

Two members of the Honolulu County Medical Society were recently awarded official military commendations by Lt. Gen. Robert C. Richardson, Jr., for outstanding medical services rendered to the community on and after December 7th, 1941. DR. F. J. PINKERTON, first as a member of the preparedness committee of the Medical Society, and later as the director of the territorial blood plasma bank under the office of civilian defense, contributed significantly to the Pearl Harbor emergency. DR. FRANCIS J. HALFORD was director of shock and burn teams, emergency, medical and ambulance service, Honolulu, on and after December 7, 1941.

Brewster Morgan, son of DR. and MRS. JAMES A. MORGAN, flier in the American Eagle squadron of the RCAF, has been rescued from a German prison camp where he had

remained almost two years. Captain Morgan flew more than fifty missions before being shot down.

CAPTAIN HOWARD K. GRAY, M.C., U.S.N.R., formerly chief of surgery at U. S. Naval Hospital, Aiea Heights, and staff member of the Mayo Clinic, Rochester, Minn., has been assigned to the naval hospital, San Diego, California, in charge of the surgical department.

Private Richard W. Boyden, whose father is DR. ALFONSO W. BOYDEN of Koloa, Kauai, has been reported missing in the European theater.

DR. RICHARD K. C. LEE, director of public health at the territorial board of health is taking a year's leave of absence beginning this month to study clinical practices at the New York Postgraduate School for a year. DR. LEE wishes to do work in skin and venereal diseases.

CAPTAIN BERTRAM GROSS, M.C., A.U.S., formerly Honolulu supervisor of the dengue control program, has been appointed acting health officer for Kauai county, effective last July 1.

DR. HOMER N. IZUMI transferred his membership to the Honolulu County Medical society from Maui, and has opened offices for the general practice of medicine and surgery at 269 South Vineyard St. in Honolulu. DR. IZUMI was for five years staff officer at Kula Sanatorium.

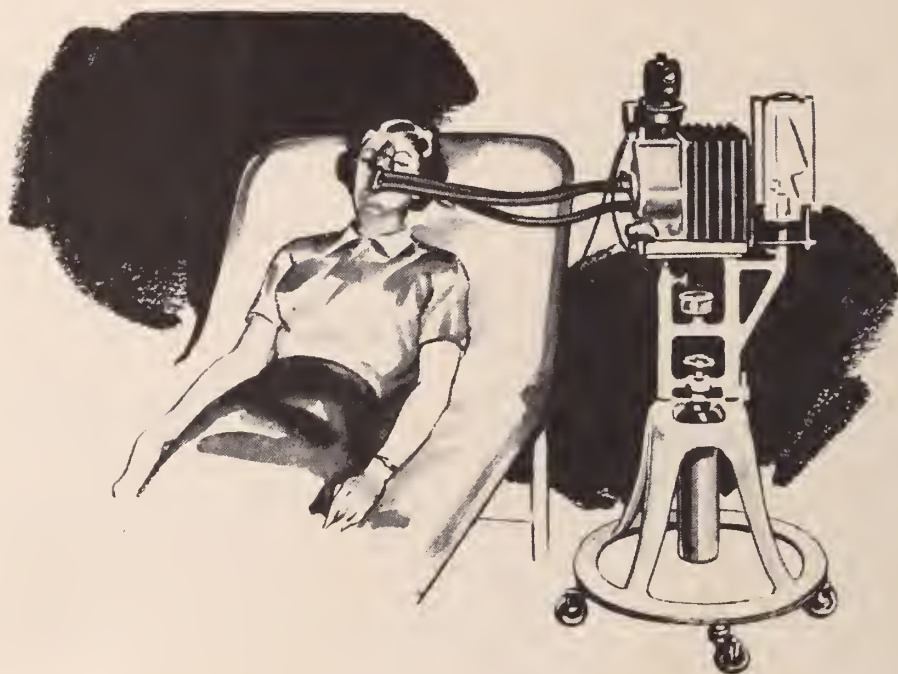
Back from schooling at the University of Pennsylvania, Mayo Clinic, Tulane Medical School and the N. Y. Graduate School, DR. YORIO WAKATAKE, Honolulu obstetrician and gynecologist, has resumed his practice at 2038 South King St. DR. WAKATAKE was resident for a while at the White Memorial Hospital, Cook County Hospital, Chicago. Since his return to the islands he has been house physician at the Kapiolani Maternity and Gynecological Hospital.

DR. RICHARD D. KEPNER, privately practicing psychiatrist in Honolulu, has been elected to the American Psychopathological Association, an organization which limits its membership to 150 psychiatrists in the United States, and also to the Association for Research in Nervous and Mental Diseases.

Sons have been the custom for Honolulu physicians over the past few months. DR. and MRS. RALPH B. CLOWARD were the first to present a son. DR. and MRS. A. W. DURYEA followed with Arthur Warren Duryea, Jr., on June 26. DR. and MRS. ROBERT WONG, and DR. and MRS. L. Q. PANG also added a new male member to their families. DR. LEON MERMED of the Honolulu Blood Bank and MRS. MERMED proved the exception to the rule, welcomed their third child, a daughter, on June 12.

DR. L. CLAGGETT BECK of The Clinic has returned to St. Croix, in the Virgin Islands, as a government physician there. Dr. Beck came to Honolulu from the Virgin Islands six years ago.

Miss Ethel Tsutsui, manager of the Secretarial Service, the medical book agency in the Mabel Smyth Building, is now Mrs. Charles Matsuura.



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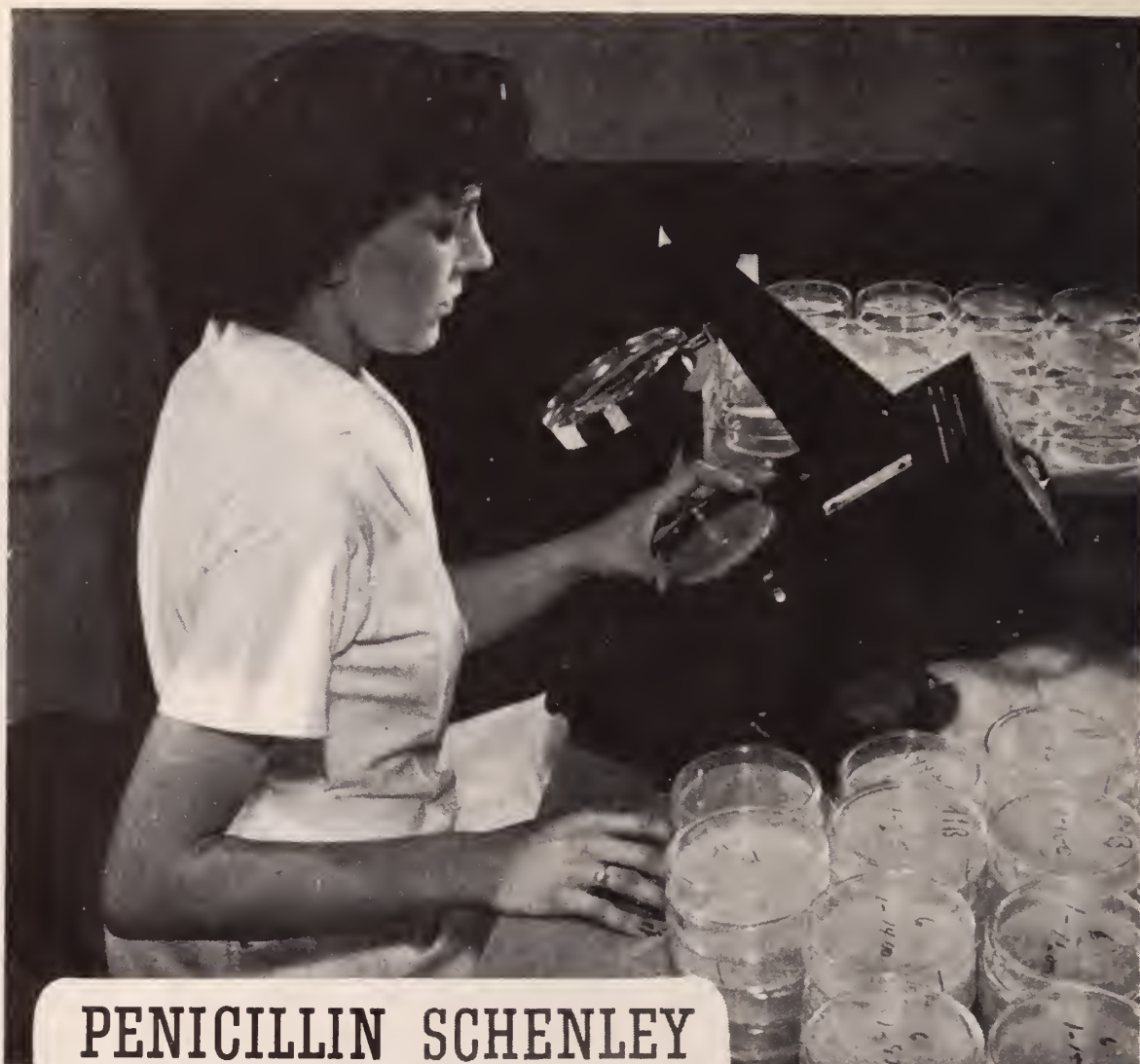
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\*Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154  
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

Proc. Soc. Exp. Biol. and Med., 1934, 32, 241  
N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592

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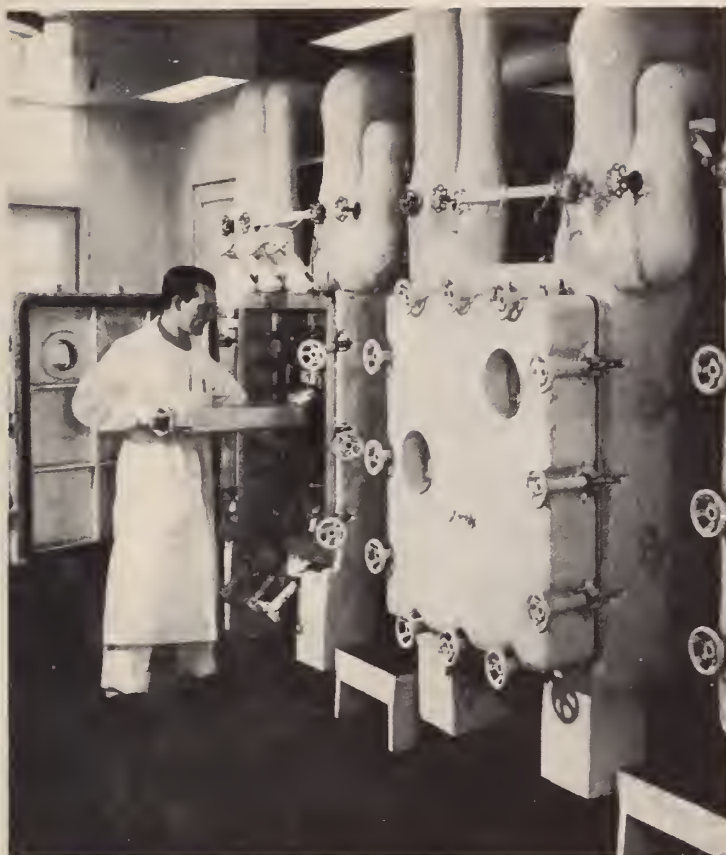
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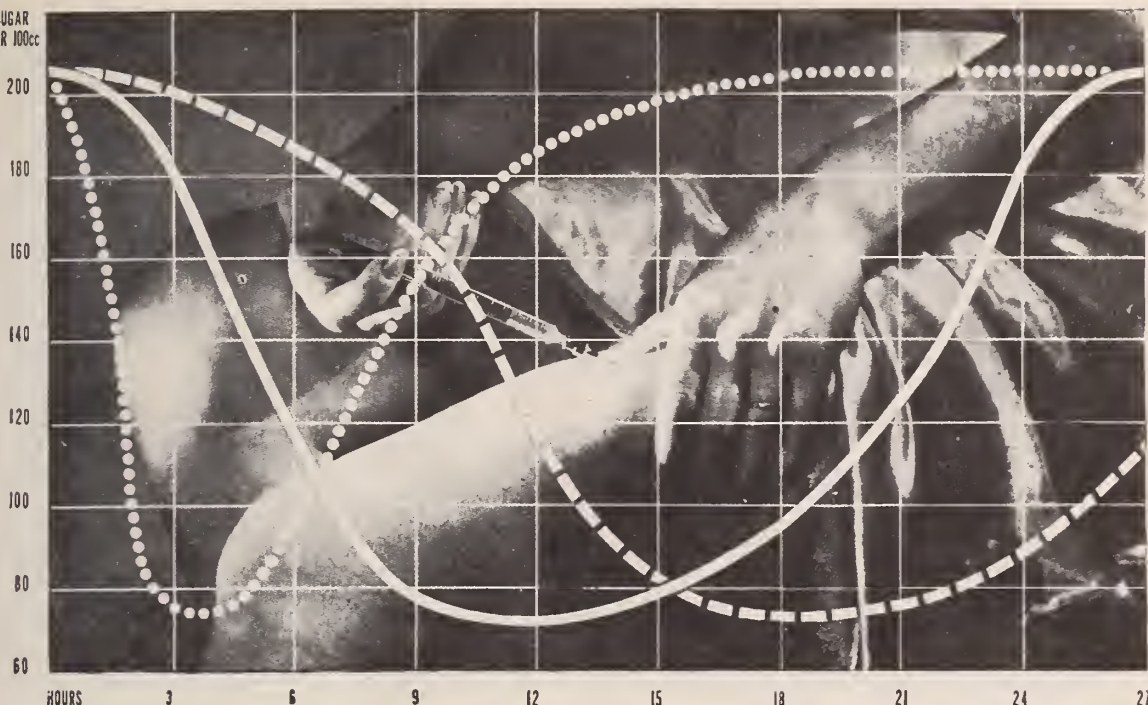
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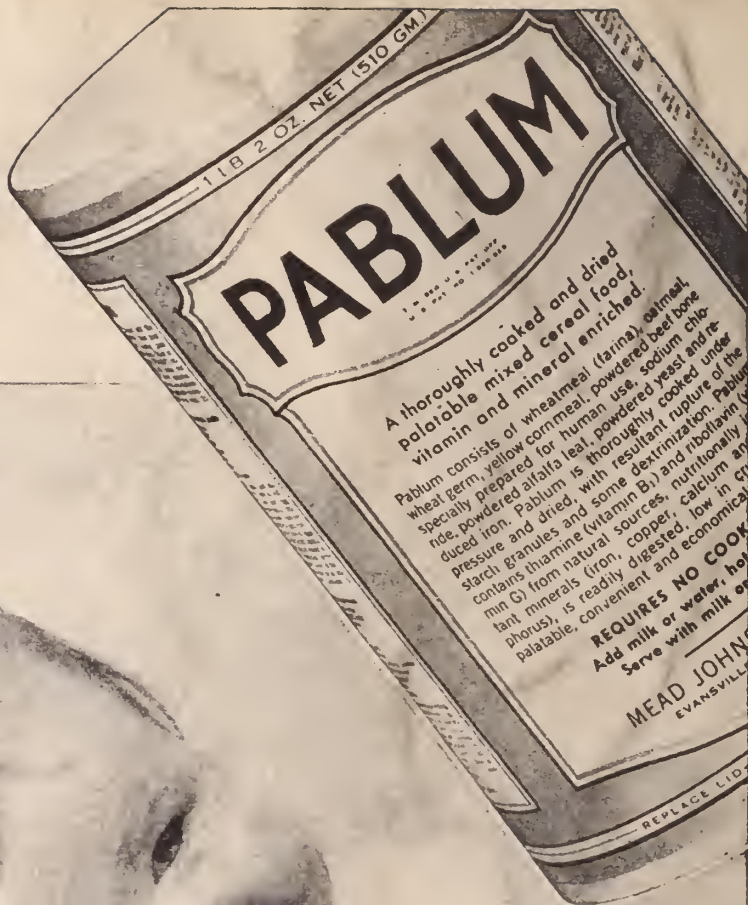
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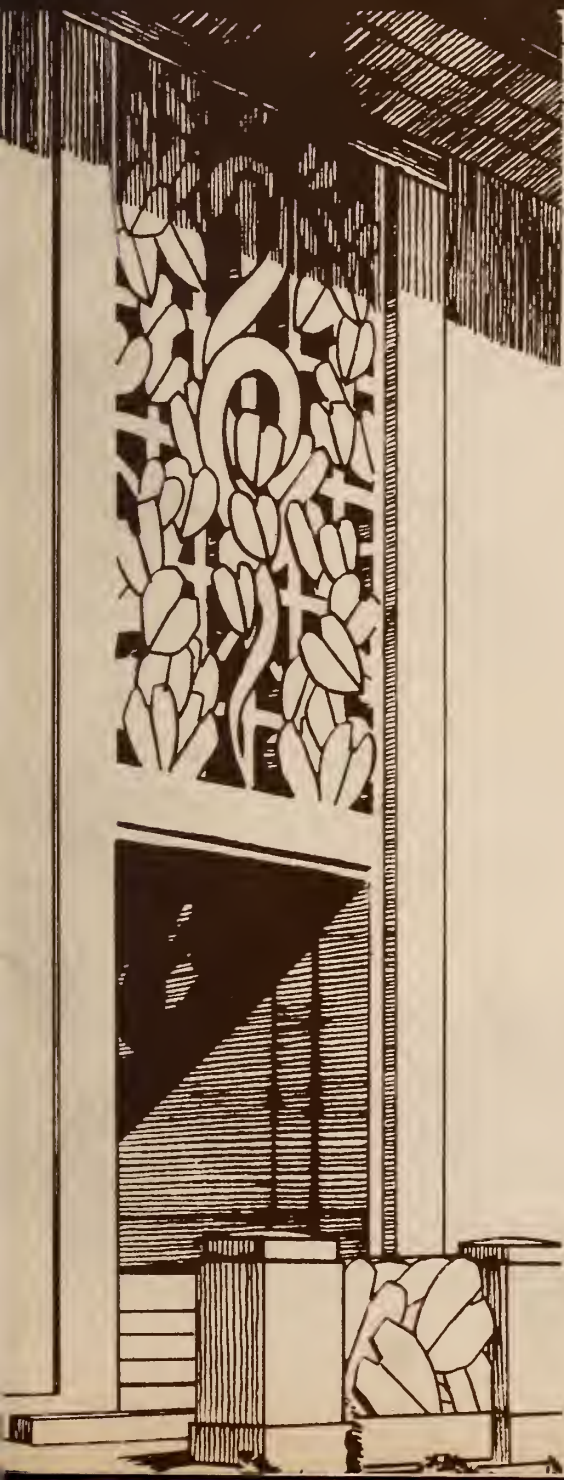
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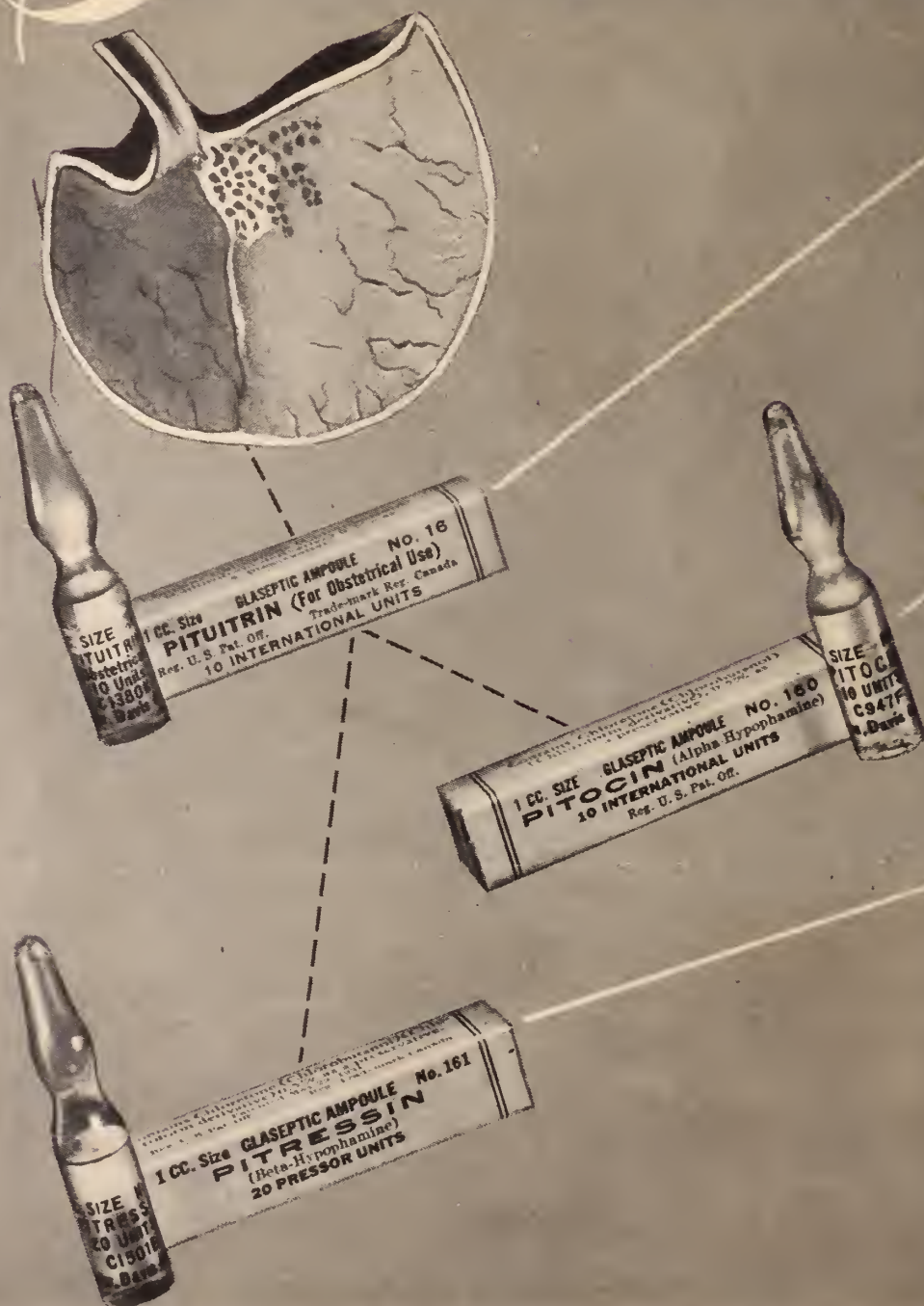
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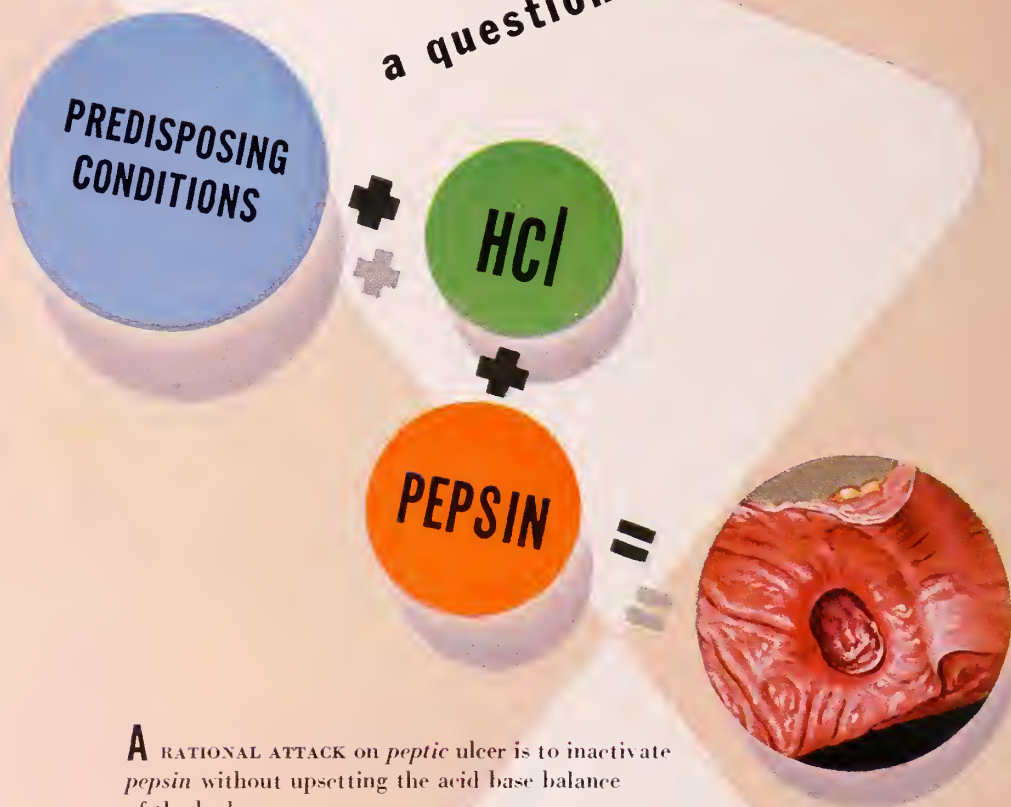
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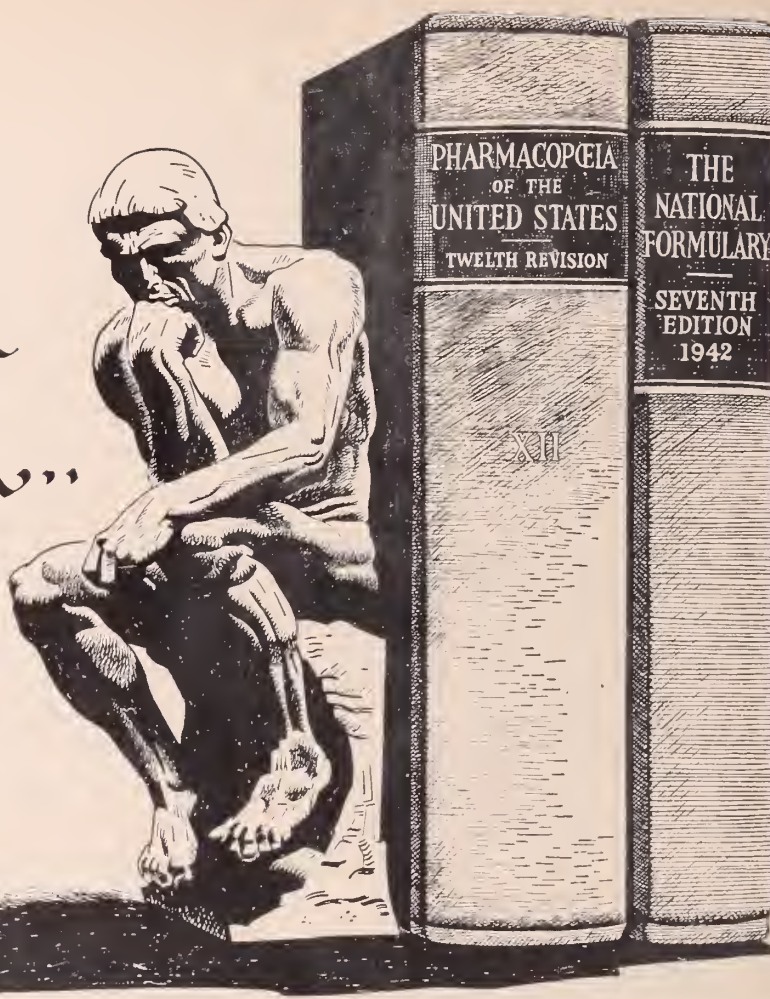
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# Mumu

## A FEW FACTS ABOUT FILARIASIS FOR FOLKS WHO FEAR THAT FILARIA-INFECTED FELLOWS WILL FETCH FILARIAE FROM THE FRONT

COMMANDER R. N. BABIONE, M.C., U.S.N.

Let's get acquainted with *mumu*, the Samoan word for "red." This word is about to become popular in medical literature as the best fitting handle for the allergic, or early, phase of filariasis<sup>1</sup>. This is the only phase of the disease so far seen in the men who recently contracted filariasis in the Samoan and other areas. It bears the same relation to elephantiasis that hay fever bears to nasal polyps. The one is a temporary edema, which will subside when the allergen is removed; the other is a loose connective tissue proliferation, and it does not subside. Elephantiasis is a terminal stage following tens or scores of years of repeated insults to the lymphatic system, usually involving pyogenic bacteria as well as worms. It does not necessarily follow worm infestation, and is not expected as a sequel to simple *mumu*.

Let us confine our attention to the less well known early phase of filarial infestation. The victims call it *mumu*, which is the term the Samoans gave it. This is fitting because, in addition to the swelling, there is often a red streak or patch. This is broader than a true lymphangitis, and, unlike the latter, frequently spreads down the arm or leg instead of towards the body. A very similar swelling and redness is sometimes noted in sensitized persons around the site of a typhoid injection.

These swellings come and go, frequently are brought on by exercise, and disappear fastest during rest. They sometimes seem to migrate, appearing at the shoulder one week, the elbow the next week, the forearm later, and perhaps at the wrist finally. Sometimes, after the swellings and migrations cease, a knot or thickened lymphatic channel remains at the site of the last swelling. If this is dissected out, and sectioned carefully, a dead adult filarial worm will often be found\*. If the worm has been dead for some time, it will show as a degenerated or calcified mass, with a foreign body reaction around it. Living, motile, adult worms have been dissected free on at least two occasions<sup>2</sup>. They have also migrated out of sections of freshly excised nodes, placed in saline<sup>3</sup>.

The manifestations are characteristic of allergy. There is often a marked eosinophilia of the blood. Forty per cent is not rare. The peri-lymphatic tissue around a worm is filled with eosinophils. When an

extract of another filarial worm (*Dirofilaria immitis*) is injected intra-cutaneously, a swelling and redness occurs which is exactly like *mumu* itself. Unexposed persons usually do not show this: their skin test is negative. The skin tests of persons bitten by filaria-infected mosquitoes become positive *before* clinical symptoms of *mumu* appear<sup>2</sup>. This may occur in a few months if the victim receives many bites and if he is a type of person easily sensitized. In one small series, 7 per cent of young adult males reacted positively before exposure<sup>2</sup>. This finding may be the result of prior sensitization to other round-worm antigens, e.g., *Trichinella spiralis*. It may have been such persons who showed the abnormally short incubation periods of three months, from exposure to first symptoms of *mumu*.

Diagnosticians should remember that *mumu* patients rarely if ever show micro-filariae, or baby worms, in the blood. Conversely, those persons whose blood is teeming with micro-filariae are not bothered with any symptoms of *mumu*. This is a little known concept: Either the worms and the man bother one another, in which case the man has *mumu*, and the worm becomes surrounded by edema and eosinophils every time she extrudes a foreign protein: or the man and his worms get along well together, the man free of symptoms and the worms busy procreating unimpeded<sup>4</sup>. The latter stage may occur in white people who become "desensitized" by large and repeated doses of worm protein. In fact, a bad attack of *mumu* may render the skin test temporarily negative (cf. the anergic phase of the tuberculin test).

The timorous citizen and the alarmed Public Health Officer need not fear the victims of *mumu*, but rather the perfectly asymptomatic natives of Samoa or Puerto Rico. Their dread of the poor *mumu* case will evaporate when they realize how much exposure is required in order to develop a good producer of micro-filariae. Even in Samoa, where transmission is intensive, micro-filariae are not often at demonstrable levels in the blood of children under ten years of age, and have been found only once in that of a child under three years of age. Visualize babies and young children, with absolutely no protection from mosquito bites, living in close contact for years with parents whose blood is teeming with micro-filariae, and try to estimate the number of worms they have received before becoming a demonstrable source of filariasis. It is doubtful that service men from Samoa have had even a small fraction of that amount of exposure.

\*The adult worm is about as thick as a coarse hair, and 1½ to 3 inches long. It is usually coiled.

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This leads us to believe that few of these *mumu* cases will ever show micro-filariae in the blood, and those that do finally reach that stage will show scant numbers compared to the average "native." So far, at least, no micro-filariae have ever been found in the blood of cases among the troops.

To account for this fact, a hypothesis has been based upon the miles of lymphatics in which the worms live. Male and female worms must mate before baby worms can be produced. Perhaps it would take scores or even hundreds of worms in the body before a single mating would be likely to occur. On further thought, recalling that these worms possess motility, the lymph nodes would seem to afford a convenient trysting place, and even in worms it should be presumed that love will find a way.

Furthermore, against this hypothesis of non-mating, stands the fact that gravid female worms have been reported in tissue sections, and found alive in lymph nodes, in cases of *mumu* which showed no micro-filariae in the blood<sup>3</sup>. There are probably several reasons for the failure to find micro-filariae. First, we do not know how thoroughly the swelling of *mumu* interferes with the free migration of micro-filariae through the lymphatics. Secondly, we do not know how many reproducing female worms are needed to stock the blood with a discoverable number of micro-filariae in each cubic centimeter of blood. Lastly, we suspect that micro-filariae do not circulate long in sensitized persons. It has been reported that micro-filariae have been found in the blood of the recipient as long as six weeks after a transfusion with blood rich in micro-filariae. (They do no harm, cannot multiply, and eventually die.) The recipient was probably not sensitized to worm protein at the time of the transfusion. But we may offer a hypothesis that in cases of *mumu*, which are highly sensitized to worm protein, the baby worms are picked off rather quickly after their release, thus preventing accumulation.

The fact that so far no micro-filariae have been found in the cases of the present war is no assurance that they will not someday appear. But we have seen that it probably takes many worms to sensitize a man, and many more to desensitize him. The stage of *mumu* means that the first worm assault is in progress and is being resisted. At this point we now remove the case from exposure to more worms. If the worms are not too numerous, they will all die before the man becomes desensitized. We know that many worms do die. It is possible that some of our troops received such heavy infestations in a short time that, in spite of worm casualties, some worms may survive until the man becomes desensitized. If enough worms should survive to this point, they might be able to keep the man desensitized, and go into production. In view of the findings in native children, such cases would be a rare exception. And even if they should produce some baby worms, they could never approach the production rate found in

the Samoan adults who have had 20 to 100 times this much exposure to filarious mosquito bites. Furthermore, in their communities, they will be lone producers, not aided by 20 per cent of the remainder of the population as was the case in the villages in which they contracted *mumu*.

In any event, people enjoying American standards of living would not tolerate the number of mosquito bites which produced our Samoan cases of *mumu*. Remember, too, that our "menace" must go on producing micro-filariae year after year for many years in order to produce secondary micro-filaria-carriers. This he will be unable to do unless he reinfects himself. His original stock of worms will die of old age before he could produce a secondary distributor of micro-filariae.

Filariae don't fare well in the United States. There was once a pool of filariasis around Charleston, S. C. It has practically died out. Many laborers from the West Indies have been imported to East Coast States with their blood teeming with micro-filariae. No alarm has been noted. Our troops with *mumu* have no demonstrable micro-filariae, and probably most of them never will have. Certainly they are far less dangerous than these West Indian laborers.

It may be further reassuring that, unlike malaria organisms, worms do not multiply in the mosquito. Instead, they undergo a necessary moult or two, in order to become a penetrating worm, then crawl into the mosquito's proboscis. They come out of the mosquito, one worm for each worm that went in. The mosquito doesn't like it either. It probably makes her tired, having those worms shedding their skins in her thoracic muscles. At any rate, filaria-infected mosquitoes appear to fly very short distances, rarely over 25 yards from native habitations. From this fact comes our best method of prevention, to keep troops out of native villages when mosquitoes are biting. And keep the natives out of military encampments.

Lastly, filaricidal drugs are known, and their use will be perfected. At present, they aggravate symptoms when given to *mumu* cases in effective doses<sup>5</sup>. This finding was predicted by those who believed that allergy was the cause of symptoms of *mumu*. Dead worms give off a protein at a much more rapid rate than live ones. An alarming reaction also follows administration of filaricidal drugs in dogs which are heavily infested with *D. immitis*, the dog heart worm<sup>6</sup>.

We have seen that we need not be worried any longer over *mumu* cases. Most of them will never show micro-filariae in the blood. Those very heavily infested patients who pass through the phase of *mumu* to the stage of desensitization with surviving worms, are likely to show few if any micro-filariae in the blood until desensitization occurs. Once the patient is desensitized, mass slaughter of adult worms should be possible without aggravation or exacerbation of symptoms.

## SUMMARY

1. Our cases suffer *mumu*, an allergic response to worm protein, but do not produce micro-filariae in the blood, at least in demonstrable numbers.

2. It takes years of intensive exposure to develop a good micro-filaria-producer. Our men have not had that exposure.

3. In most of our men, the worms will probably all die before the man is desensitized; if some should survive, they will not be in large numbers, nor have sufficient life expectancy to produce secondary micro-filaria-carriers.

4. Transmission in the homeland will be inefficient also because of the average citizen's aversion to mosquitoes, and the extreme paucity of the reservoirs of micro-filariae.

5. Filaricidal drugs are known. They can be used if needed, to control transmission. At present, they are still in the experimental stage, and they appear to aggravate the symptoms of *mumu*.

## REFERENCES

1. *Mumu* first appeared in the literature in an article by Prof. Buxton, entomologist of Samoa. In 1920 he described the phase of filariasis which we are now seeing. The word has become standard usage among all the troops who have been stationed in the Samoan area since Pearl Harbor. It is used freely by Dickson et al<sup>2</sup> and Michael<sup>3</sup>.
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3. Michael, Paul: Filariasis among Navy and Marine Personnel, U. S. Nav. Med. Bulletin 42:1059 (May) 1944.
4. Modified from Buxton, quoted by Dickson et al<sup>2</sup>.
5. Personal communication, Lt. Comdr. W. P. Robert (MC), USNR.
6. Personal communication, Dr. Eric Fennel, Honolulu.

---

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# Congenital Anomalies of the Coronary Arteries

LIEUTENANT COLONEL H. JULIAN FRACHTMAN, M.C., A.U.S.

As one would anticipate, congenital anomalies of the coronary circulation may take any conceivable form, varying from minor deviations to major defects. Similarly, the clinical manifestations of such anomalies may range from no symptoms at all, to marked coronary insufficiency incompatible with life. Abnormalities of this type are not of great importance to the clinical cardiologist; but to the pathologist, the pediatrician and the research cardiologist, they are worthy of note; and to the medical profession as a whole, because of the great importance of coronary disease, they should be of interest.

## EMBRYOLOGY

As the fetus develops its own circulatory system, there is in the beginning a single-chambered heart and a common efferent blood vessel, through which blood moves away from the heart. Later, endothelial buds branch off this common blood vessel to form the anlagen of the coronary arteries. A septum forms which divides the primitive single artery into the aorta and the pulmonary artery. Anomalous coronary arteries may result either from displacement of the endothelial buds or from displacement of the septum. Thus it is theoretically possible for both the coronary arteries to arise from the aorta, for both to arise from the pulmonary artery, or for the left or the right to arise from the pulmonary artery while the other takes its origin in the aorta.

## ANATOMY

The *left* coronary artery arises in the left posterior aortic sinus and after about 1 cm. divides into the *anterior descending branch* and the *left circumflex branch*. The anterior descending branch courses downward in the anterior longitudinal sulcus, overlying the interventricular septum, to the apex, giving off small branches to the adjacent portions of the left and right ventricles. The left circumflex artery runs in the coronary sulcus to the left, around the left ventricle to the posterior wall of the ventricle, usually terminating before reaching the posterior longitudinal sulcus. It thus nourishes the left atrium, the anterior and lateral portions of the left ventricle and a part of the posterior wall of the left ventricle.

The *right* coronary artery arises in the anterior aortic sinus and extends to the right around the right ventricle in the coronary sulcus. It gives off the *marginal branch* which travels along the right margin of the heart at the junction of the anterior and posterior

surfaces of the right ventricle, and the *posterior descending branch* which follows the course of the posterior longitudinal sulcus toward the apex, where it may anastomose with terminal branches of the left anterior descending artery. The right coronary artery generally extends for a short distance after the posterior descending branch is given off to supply the right atrium and a portion of the left ventricle adjoining the posterior longitudinal sulcus. Thus, the right coronary artery nourishes the anterior, lateral and posterior walls of the right ventricle, the right atrium and a portion of the posterior area of the left ventricle.

## ANOMALIES OF THE RIGHT CORONARY ARTERY

The right coronary artery is *poorly developed* in eleven per cent of cases<sup>1</sup>. An instance of this was recently seen by the author in an individual who had died of an acute occlusion of the left anterior descending coronary. In spite of the fact that the right coronary was unusually small and poorly developed, there was no evidence of degeneration or fibrosis in the area normally supplied by it, indicating that the left coronary had taken over this function without difficulty by means of small branches. However, Whiting<sup>2</sup> reports the case of a 14-year-old girl who had frequently recurrent attacks of typical angina pectoris and who died following an emergency appendectomy. Post-mortem findings included a defective cusp of the mitral valve and a rudimentary right coronary artery. The heart weighed 425 grams, with a markedly thickened left ventricular wall (19 mm. in thickness) and a thin, atrophic right ventricular wall (3 mm. in thickness).

The right coronary artery may be entirely *absent*<sup>3</sup>. Krumbhaar and Ehrich<sup>4</sup> report the case of a 44-year-old woman who died from a pulmonary embolism. At autopsy, the right coronary artery was found to be completely absent and the single left coronary artery was found to supply the area of the heart normally supplied by the right. This was considered to be an incidental finding in view of the fact that there had been no evidence, during life, of cardiac disease. These investigators refer to 4 additional cases reported by other authors in which the right coronary was completely absent. The cases were: (a) a 37-year-old man who died as a result of subacute bacterial endocarditis, (b) a 33-year-old man in whom a cerebro-vascular accident was the cause of death, (c) a 39-year-old woman who died of pneumonia and (d) a 63-year-old man in whom carcinoma of the stomach caused death. In each instance the left coronary supplied the necessary branches to the usual distribution of the right coronary. Such an arrangement appears to be not incompatible with life.

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The right coronary artery may arise from the *pulmonary artery*. Soloff<sup>5</sup> in his survey of this condition notes two such cases. In each case, the individual was an adult who had had no previous cardiac symptomatology and who died of unrelated disease, one patient being 30 years of age and the other 63 years of age. At post-mortem examination, no significant pathological changes were found in the myocardium.

Abbott<sup>6</sup>, in her study of congenital heart disease, mentions 10 cases in which the right coronary artery was found to arise from the pulmonary artery. No definite conclusions were set forth in this survey.

#### ANOMALIES OF THE LEFT CORONARY ARTERY

Several instances of this congenital defect are reported in the literature. All possible variations in clinical manifestations occur, ranging from the complete absence of symptoms with incidental finding of the defect at autopsy to instances of extreme coronary insufficiency incompatible with more than two or three days of life.

Krumbhaar and Ehrich<sup>4</sup> cite an instance in which the left coronary artery was completely *absent*. The patient was a 35-year-old woman who died of carcinoma of the uterus with wide-spread metastases. She had had no cardiac manifestations prior to death. Examination of the heart at autopsy revealed the absence of the left coronary artery. The heart was otherwise normal, and weighed 285 grams. The area of the heart normally supplied by the left was supplied by branches of the right coronary artery. In their discussion, the authors refer to 5 similar cases reported by other sources. In each case the cause of death was an unrelated disease. Four of the 5 individuals were adults from 35 to 65 years of age and the fifth case was that of a child 3 years old. In all of these cases the absence of the left coronary was compensated for by the provision of branches by the normal right coronary artery to that part of the myocardium usually supplied by the left.

Origin of the left coronary artery from the *pulmonary artery* is reported by several authors.

Ruddock and Stehly<sup>7</sup> report the case of a 30-year-old man who died suddenly while doing hard work. He had previously been in good health without any cardiac symptoms. At autopsy, it was found that the left coronary artery arose from the posterior wall of the pulmonary artery. The distribution of the anomalous vessel was essentially normal. However, there was considerable communication between it and the right coronary artery, which arose in the normal position. The heart weighed 310 grams. The right and left ventricular walls were within normal limits for thickness.

Abbott<sup>8</sup> notes the case of a 64-year-old woman who died as the result of trauma. She had had no significant cardiac symptoms prior to death. On post-mortem examination the left coronary artery was

found to arise from the pulmonary artery. The right coronary arose normally and followed the usual course, but was somewhat dilated. There was considerable anastomosis between the terminal branches of the right and left arteries. There were no other significant findings in the heart.

Chown and Schwalm<sup>9</sup> describe the case of an infant 5 months old. This child apparently had no symptoms which could be interpreted as angina pectoris but did reveal evidence of chronic disease in that there was a persistent pallor and inability to gain weight. Following broncho-pneumonia, the child expired. At autopsy, the right coronary was found to arise in the usual position, while the left arose from the posterior pulmonary sinus. The heart weighed 70 grams, though the normal weight at this age is about 30 grams. The coronary arteries followed a normal distribution. The wall of the left ventricle was from 6 to 8 mm. in thickness while that of the right was 3 to 5 mm. thick. Microscopic study revealed appreciable myocardial and endocardial degeneration. Myocardial failure was considered to be cause of death.

Soloff<sup>5</sup> presents the case of an infant 4½ months old who had seizures that were interpreted as being indicative of coronary insufficiency. At each feeding the child would apparently express severe pain by doubling up, drawing his feet up toward his chest, holding himself tense and motionless and becoming cyanotic. After a few moments he would vomit food, become very pale and perspire profusely. A few days before death it was noted that he became increasingly short of breath. Post-mortem findings included a markedly enlarged heart, 11 cm. in its transverse diameter and weighing 120 grams; the normal weight at this age is about 30 grams. The left coronary artery arose from the pulmonary artery while the right arose in its usual site. The distribution of these vessels was normal. The right ventricle showed no abnormalities while the left revealed an aneurysm of its lower half with very thin musculature.

Another instance of this defect was described in detail by Sanes and Kenney<sup>10</sup>. This was in a three-month-old female infant. Cough, dyspnea and emesis were outstanding symptoms. Peripheral edema and clubbing of the fingers were not observed. Cyanosis appeared only terminally. Physical examination revealed retraction of the intercostal spaces on inspiration, bulging of the left side of the chest, marked enlargement of the heart, poor heart tones, increased aortic second sound, and pulmonary atelectasis. At autopsy, the left coronary artery was found to arise from the pulmonary artery, while the right arose normally. The left ventricle was hypertrophied and dilated. There was a partial apical aneurysm present. Considerable myocardial degeneration, necrosis and fibrosis of the left ventricle were noted.

These authors (Sanes and Kenney) also reviewed cases reported separately by Abriskoff, Heitzmann,

Kiyokawa, Corrington and Krumbhaar, and Scholte. The patients were respectively 4, 3½, 4, 10 and 2½ months old, and in each, the left coronary artery arose from the pulmonary artery. The clinical and pathological findings in each case were similar to those in the case just described.

Another instance of this anomaly is recorded by Bland, White and Garland<sup>11</sup>. A few others have been reported by German investigators. In this group of cases, the ages of the patients varied from two days to fifty-three years at the time of death.

#### MISCELLANEOUS ANOMALIES

Origin of both coronary arteries from the pulmonary artery is extremely rare. This defect is not compatible with life. Grayzel and Tennant<sup>12</sup> describe such a defect in an infant who died at the age of ten hours. Ruddock and Stehly<sup>7</sup> refer to a case reported by Limbourg of an infant that died at the age of ten days. In each of these, both coronary arteries were found to arise from the pulmonary artery.

Variations in the distribution of coronary arteries that arise in the usual site occur very commonly. However, the normal range for such anatomical variations is wide and they appear not to disturb the physiology of the heart. Anastomosis between terminal branches of the right and left coronary arteries, and the distribution of many small unnamed branches, compensate well for any such departures from the classical anatomy.

One or more accessory coronary arteries may be present, but this is of no practical importance.

Anomalies of the venous circulation of the heart, and the persistence of the embryonic sinusoids, are of no significance.

There are no reported cases of the absence of both coronary arteries.

#### DISCUSSION

Probably the outstanding lesson to be emphasized from the study of these anomalies is the fact that adequate arterial anastomosis is the basis for proper nutrition of the heart and consequent normal function. Hyrtl's postulate that one artery should supply the whole heart appears to be borne out in many of these cases. The absence of clinical manifestations in several instances of anomalous cardiac blood supply can best be explained on the basis of direct arterial or arteriolar connections between the normal and abnormal vessels, or in the case of an absent vessel, by the presence of branches from the remaining artery supplying the area of the heart normally supplied by the artery that is missing. Acceptance of this premise aids in understanding the variation in mortality in acute coronary occlusion in hearts which have the usual anatomy of the coronary arteries. The individual who lives through such an episode has devel-

oped a new blood supply to the area of infarction while the individual who dies has failed to meet this demand.

In the same manner, the development of compensatory blood supply in the heart in which the coronary circulation is congenitally abnormal permits the heart to function in a normal manner. The cases cited, of adults who have lived for many years without clinical manifestations of such defects, substantiate this thesis. On the other hand, cases of a grossly similar type have demonstrated incompatibility with life for more than a few days or a few months. In these instances, compensatory anastomoses have failed to develop. The extent of the myocardium supplied by the anomalous artery and the degree of exertion by the infant may possibly determine the average length of life.

The influence exerted by the amount of pressure and degree of oxygenation in the coronary blood flow should be considered. Deficiency of oxygen in this circuit appears to be a most important factor. Low oxygen tension leads to accumulation of lactic acid and other irritant metabolites. This in turn brings about the pathological changes of degeneration, necrosis and fibrosis. These findings are similar to those found in the hearts of adults in which there has been gradual coronary occlusion.

But in the final analysis, anastomosis would seem to be the key to the problem, for it alone can explain why some individuals with the same anomalous origin of a coronary artery live for many years without cardiac symptomatology while others die after only a few months of life. If there is adequate anastomosis, the problems of oxygenation and pressure are readily solved. This, of course, would not be true in those extremely rare cases in which both coronary arteries arose from the pulmonary artery.

As far as ante-mortem diagnosis is concerned, this can be done in some instances, but, in general, it is the pathologist who will find these defects.

#### SUMMARY AND CONCLUSIONS

1. Congenital anomalies of the coronary circulation occur very infrequently.
2. Instances are reported of the absence of either of the coronary arteries, or of the origin of the left or the right or of both coronary arteries from the pulmonary artery.
3. The clinical manifestations in these various defects range from no apparent symptoms or signs to incompatibility with life.
4. Except for those defects which are obviously incompatible with life, such as the origin of both coronary arteries from the pulmonary artery, no definite correlation can be made between the gross anatomical defect and the absence, presence or degree of signs and symptoms of coronary insufficiency.

5. In those cases in which clinical evidence of the defect is lacking, it would appear that compensatory circulation has developed. When such compensation has not occurred, coronary insufficiency is manifest.

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# Gastrojejunal Ulcer as Related to Gastro-Enterostomy

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Over a period of twenty-five years, during which time I have been actively interested in the surgical treatment of lesions of the stomach, there has been a radical change in the attitude regarding the value of gastro-enterostomy.

As early as 1916, Bland Sutton of England began calling attention to the fact that gastro-enterostomy in the treatment of nonobstructing duodenal ulcers gave unsatisfactory results, and advocated pylorectomy with removal of the ulcer. The German surgeons, particularly von Haberer, wrote voluminously on this subject and advised even more radical surgery, namely, removing as much as one-half of the stomach.

During the early 1920's, in America, gastro-enterostomy with or without modification was enjoying great popularity and was almost universally regarded as the operation of choice in the treatment of benign lesions of the stomach and duodenum. Such was the case as noted in various clinics on my trips to the mainland in the early '20's with one exception. At Mt. Sinai Hospital in New York on the service of Drs. Lewisohn and Berg, radical removal of the stomach was being done for both benign gastric and duodenal ulcers. Well do I remember Dr. Lewisohn presenting a paper before the New York Academy of

Medicine in which he stated that they had found an incidence of 34 per cent of gastrojejunal ulcers following gastro-enterostomy, 18 per cent proven by re-operation, this being the basis for their discarding conservative operations for radical resection. The discussions that followed this presentation were heated and without exception discredited Dr. Lewisohn's observations.

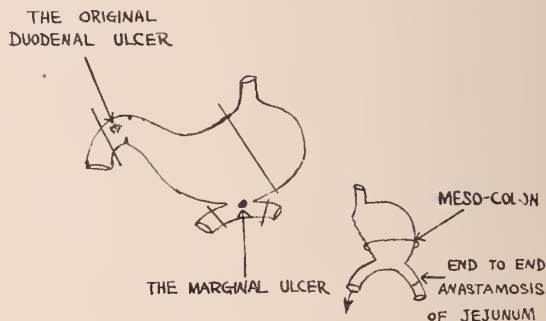


Fig. 2. Technique of dealing with marginal ulcer. Radical resection of stomach with limbs of gastro-enterostomy, end-to-end anastomosis of jejunum, anastomosis of jejunum and remaining stomach, Polya-Hofmeister method.

It has been interesting to me to follow the trend of events as related to this subject since that time. Dr. Lahey, an original believer in conservative surgery for such lesions, pointed out that it was hard to convince the medical profession that it was necessary to sacrifice a large amount of apparently normal stomach to cure a lesion of the duodenum frequently no larger than a few millimeters in diameter. With few exceptions, in America as elsewhere, it is now the belief of those with the greatest experience that the greatest success in dealing with gastroduodenal ulcers follows radical resection of the stomach. No one claims that gastrojejunal ulcer never follows radical resection, for it occasionally does. It is maintained, however, that gastric acidity is reduced by resection to the point where this likelihood is small.

With present methods of pre- and postoperative care; with improved types of anesthesia; with adequate amounts of blood at our disposal in the prevention of shock, gastric resection can be done with comparative safety. Considering the complications that are likely to follow, and operative mortality, radical resection is the operation of choice, in preference to conservative operations, in the majority of cases.

Gastro-enterostomy in the treatment of duodenal ulcer may be the operation of election if there is marked pyloric obstruction, if the individual is beyond middle life and the gastric acidity is relatively



Fig. 1. X-ray of stomach after gastro-enterostomy and previous to resection.

low, and particularly if, added to this, the individual is a poor operative risk.

The subject of gastric resection for duodenal ulcer has recently been well presented by Dr. Lewisohn in the April issue of *Surgery, Gynecology and Obstetrics* for the current year.

Early in my experience with the surgical treatment of duodenal ulcer, I became convinced that radical resection was the operation of choice, and I have not, without special indications, done conservative operations for a number of years.

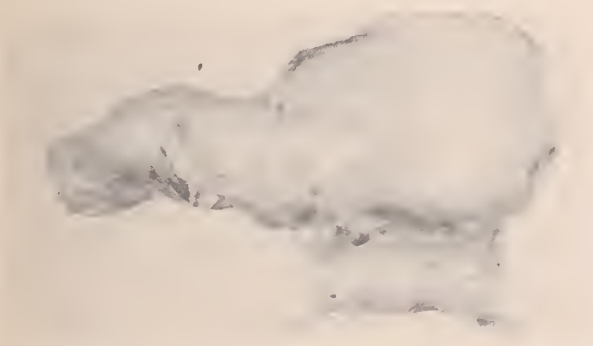


Fig. 3. Specimen removed at operation—stomach and first part of duodenum with attached limbs of jejunum leading to gastro-enterostomy.

However, in my more immature years, to be exact in 1920, just twenty-five years ago, I did do a gastro-enterostomy on an individual, a Filipino man, age 20, for duodenal ulcer. Subsequent developments have been interesting and informative. For a year or two he was relieved of his symptoms, but on the whole he continued to have epigastric distress. In September of 1944 he was admitted to The Queen's Hospital because of a rather severe gastric hemorrhage. Subsequent roentgenograms and gastroscopic examinations confirmed our impression that the patient had developed a gastrojejunal ulcer and this was verified at operation. Uneventful recovery followed radical gastric resection.

Gastrojejunal ulcer is a serious complication. It is distressing to the patient; it seldom responds to medical measures; it is frequently associated with serious hemorrhages; and it may perforate into the abdomen or into the transverse colon, forming a gastrojejuno-colic fistula. The most characteristic clinical finding is that whereas the duodenal ulcer produced epigastric pain and distress, the discomfort is now to the left and above the umbilicus at the site of the gastrojejunal stoma, and in this area there is usually marked tenderness. Visualizing the ulcer crater may or may

not be possible with x-ray studies, and the same may be the case with the gastroscope. Both methods are usually diagnostic, however.

I have had occasion to operate upon 13 such complications, all following gastro-enterostomy for duodenal ulcer. One had perforated into the colon and another necessitated resection of part of the wall of the colon in its correction. The onset of a colic fistula introduces a number of complicating features that are fraught with grave danger to the patient, and the correction of this condition is a major surgical event. When the colon is not involved, radical resection of the stomach and ulcer is carried out as shown in the accompanying diagram.



Fig. 4. X-ray to show small amount of stomach remaining.

#### SUMMARY

1. Radical resection of the stomach, when surgical intervention is indicated in duodenal or gastric ulcer, is the operation of choice.
2. Gastro-enterostomy in benign ulcer may occasionally be indicated in selected cases.
3. Gastrojejunal ulcer not infrequently follows gastro-enterostomy for duodenal ulcer but may not develop for as long as twenty-five years following the primary operation.

# Bronchiectasis

COLONEL FORRESTER RAINE, M.C., A.U.S.

Bronchiectasis is hardly a disease entity, because it arises as a result of, or is a complication of, so many different diseases. Actually, bronchiectasis means "dilation of part or virtually all of the bronchial tree." With this enlargement is associated some change in the mucous membrane, frequently ulceration; some change in the bronchial wall, usually loss of elastic fibers; and very commonly there is complete absence of a part of the bronchial wall with the bronchiectatic space extending into the surrounding lung tissue.

Bronchiectasis may be divided into congenital and acquired types. Either of these types may take forms of bronchial dilation which we describe as saccular, cylindrical, fusiform, or varicose.

## CONGENITAL BRONCHIECTASIS

Bronchiectasis has been called a children's disease, and in many respects this is true, for it tends to be present or start early in life, although it may not be recognized until adult life. The congenital form of bronchiectasis is the result of developmental anomalies; it may involve only a portion of the bronchial tree, which gives rise to the telangiectatic form, or it may involve virtually the entire bronchial tree, the universal type. Congenital cystic disease has been classed by some as a form of bronchiectasis, but this concept is open to some question.

Symptoms of pulmonary or bronchial involvement may be absent in the newborn in spite of rather extensive bronchiectatic lesions. Their presence becomes apparent only after an upper respiratory infection when extension involves cavities or one of the independent cysts ruptures producing empyema or tension pneumothorax.

## ACQUIRED BRONCHIECTASIS: CAUSES

Several causes of bronchiectasis are known, but there are many patients the etiology of whose disease is obscure. Causative agents may be grouped as follows:

### *Intrabronchial*

Foreign bodies and bronchial tumors both benign and malignant are common causes. The mechanism of the development of bronchiectasis from partial obstruction of the bronchial lumen is rather easy to understand. Infection of the bronchial wall occurs as a result of the obstruction. Cough, with increased intrabronchial pressure on the wall weakened by in-

fection, results in dilatation of the bronchi. It is known that this process may occur rather rapidly, far advanced bronchiectasis having been found distal to a foreign body in the bronchus as early as three months. Besides the bronchiectasis which develops, there may be, of course, associated lung abscess.

### *Bronchial*

Changes in the bronchial wall causing bronchiectasis are not well understood and to a certain extent these factors are still in the hypothetical stage. Presumably metaplasia of the mucosa can cause partial obstruction; certainly ulceration of the mucosa with resultant contracture by scar can cause bronchial stenosis and bronchiectasis. There is possibly some relationship between hypersecretion of the bronchial mucosa and bronchiectasis, but known cases of severe bronchitis have existed for years without the development of any bronchiectasis. This is even true of putrid bronchitis, which at times produces large amounts of foul-smelling pus similar to that found in bronchiectasis.

### *Peribronchial*

Enlarged lymph nodes, tumors or aneurysms may compress the bronchial wall, producing a partial obstruction with resultant bronchiectasis.

### *Pulmonary*

Under this heading may be grouped several types of factors, some of which are known to produce bronchiectasis, while others are presumed to. It is thought that a goodly number of cases of bronchiectasis which are discovered without known specific cause, have been the result of pneumonia or influenza, particularly the pneumonia associated with measles or whooping cough. Certainly a large number of patients, both in childhood and adult life, are found with a far-advanced bronchiectasis for which no specific mechanical factor can be found. A history of pneumonia in childhood, of a severe whooping cough, or of protracted illness with measles, can frequently be elicited, and it is presumed that bronchiectasis has developed as a result of these diseases. Lung abscess, tuberculosis, pulmonary fibrosis, and emphysema frequently have bronchiectatic lesions associated with them. Bronchiectasis here develops as a result of pressure, erosion, or ulceration of the bronchial wall with resultant obstruction and bronchial dilatation. Unresolved pneumonia was for years thought to be a prime cause of bronchiectasis, but there is considerable question in my mind whether there is such an entity. It seems more likely that the

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initial lesion may have been pneumonitis with involvement of the bronchi, or wet atelectasis resulting in bronchiectasis or lung abscess, or both.

Until very recently it was felt that bronchial dilatation once established remained so. Very little reduction in the size of dilated bronchi has ever been observed under any type of treatment. Blades has described some rather marked bronchial dilatations following atypical pneumonia which have apparently receded completely in the course of two to three months. It is interesting to note that bronchoscopic observation revealed a very different picture from that of a real bronchiectasis. The mucous membrane was not friable and did not bleed easily as it does in the bronchus draining bronchiectatic cavities.

### SYMPTOMS OF BRONCHIECTASIS

Bronchiectasis may be unilateral or bilateral, and commonly involves the lower lobes. It becomes apparent clinically most frequently between the ages of 10 and 40. The primary symptoms are cough, expectoration of foul-smelling sputum, hemoptysis, and fever. Cough may be severe and almost uncontrollable. In some cases, on the other hand, cough is relatively slight. Expectoration is almost always present, but there are some types of dry bronchiectasis wherein expectoration may be extremely scanty. The sputum is usually abundant and foul-smelling. It may vary in amount from 30 to 1500 cc. in twenty-four hours. Hemoptysis is a very common symptom of bronchiectasis, occurring more frequently than in tuberculosis. Bleeding may be slight, continuing in small amounts for weeks. It may be massive, and many patients have died from hemoptysis. Fever is an inconsistent symptom but almost all cases will have recurring bouts of fever as the result of the bronchial wall infection extending into the surrounding pulmonary tissue. A history of repeated attacks of pneumonia should make one suspicious of bronchiectasis as the underlying lesion.

### DIAGNOSIS

Bronchiectasis can be diagnosed from the history and symptoms alone, but the diagnosis should include the type of bronchial enlargement and its precise location. This can be done only by the combined use of bronchoscopic investigation and lipiodol instillation. Furthermore, single anterior-posterior x-ray films of lipiodol instillations will not give the whole story. When only one side is filled a lateral plate will suffice, but when both sides of the bronchial tree are filled a right and left oblique view must be taken. Differentiation can be made as to the involvement of the middle or lower lobes on the right, and between the lower lobe, and the lingual portion of the upper lobe, on the left.

Physical findings vary tremendously, depending upon the amount of secretion in the bronchi and

whether at the time of examination there is associated pulmonary involvement. Coarse rales may be heard; there may be evidence of areas of atelectasis or even suggestions of cavities. Clubbing of the fingers may commonly be found. The mechanism of the production of clubbed fingers is still not entirely understood. We know that it can occur very rapidly, for I have seen it appear in the amputation stump of a finger in the course of three months. Furthermore, it is to some extent reversible, in that correction of the underlying lung pathology will cause recession of the clubbing if it has not existed too long. Bronchoscopic inspection of the bronchial tree is important in determining the origin of the expectoration, or the presence or absence of a foreign body or of obstruction to the involved lobe or lobes.

### ACCESSORY NASAL SINUS DISEASE

The relationship of chronic infection of the nasal sinus to bronchiectasis is not entirely clear. Certainly associated nasal sinus disease aggravates the bronchial infection, for many patients will have marked diminution of their symptoms after eradication of the sinus infection.

### TREATMENT OF BRONCHIECTASIS

As in other diseases, prevention should be of major concern. The following factors which are known to produce bronchiectasis should be eradicated or corrected as soon as possible. Foreign bodies in the bronchial tree should be removed immediately. Atelectasis should not be allowed to persist, and if the simpler methods of overcoming it by postural drainage, by encouraging cough, or by forced breathing of carbon dioxide are not sufficient to clear the bronchial tree and permit complete aeration of the involved lobe or lobes, then the secretion should be aspirated bronchoscopically. Bronchial stenosis, when amenable to treatment, should be cleared as soon as discovered. A benign bronchial tumor causing obstruction should be removed bronchoscopically. Lung abscesses should be treated adequately as soon as possible, since persistent lung abscess is known to produce bronchiectasis.

Evolution in treatment has been rapid, and a great many of the changes have occurred within the last twenty years. It will be worthwhile, I think, to review this evolution so that we may have a better understanding of treatment as it stands today.

### *Rest*

Rest in bed, although indicated during remissions of the disease, does not cure bronchiectasis. Symptoms will be relieved and temporary improvement will occur, but no lasting improvement results. Many doctors have felt that changes in climate are beneficial, and it does seem that some patients have much less expectoration and are more comfortable in a

high, dry climate; but climate per se does not cure the disease.

### *Postural Drainage*

Postural drainage was one of the early forms of treatment. Time has established its position as of prime importance in the treatment of the disease. Postural drainage should be tried in every case before other forms of more radical treatment are considered. Drainage may be carried on continuously or at intermittent periods. Many patients, if drained adequately twice a day, can be kept free from appreciable cough at other periods. The fetor of the sputum diminishes, sometimes markedly; recurring bouts of infection are less frequent and less severe; and hemoptysis may cease.

### *Medication*

Drugs of all kinds and descriptions have been tried, but none of them is of any lasting benefit. Arsenicals have been used, and many believed for a time that the fetor was diminished by them, but no known cures have occurred.

Bronchial sprays of all types of drugs have been used as air saturation in a closed room or by direct bronchoscopic application, but none of them have been appreciably beneficial. The instillation of lipiodol was in vogue for a considerable time, and it was felt by many that lasting benefit resulted, but this is open to grave question.

It has been difficult to understand the apparent improvement in some patients following lipiodol instillations. There is considerable absorption of iodine, but iodine therapy, per se, does not produce appreciable benefit. The soothing effect of the oil on inflamed mucous membranes may account for some of the temporary improvement noted. At the present time it does not appear that this treatment is beneficial.

### *Bronchoscopic Aspiration*

Bronchial aspiration, without question, accomplishes relatively complete evacuation of the secretions, and by shrinking the hypertrophied mucous membrane of the involved bronchus permits optimal evacuation of secretion by postural drainage. This improvement in drainage may last for a considerable time before repetition of the shrinkage with aspiration is necessary. Bronchoscopists tend to be enthusiastic about the continued and permanent results of bronchoscopic aspiration, but it is felt that although it is a distinct aid in improving the results of postural drainage and that it is essential to proper diagnosis, it is not a cure for the condition.

### *Collapse Therapy*

Three primary types of collapse therapy have been used. It was thought early in the evolution of treat-

ment that pneumothorax would afford collapse of the diseased bronchi, permit them to heal, and thus cure the disease. Unfortunately, one can secure a beautiful collapse of the entire lung and still have bronchial dilatations the same size as they were before. Paralysis of the diaphragm was thought for a time to be very beneficial. Symptoms were commonly relieved and it seemed that hemoptysis was reduced in amount and frequency. Continued observation, however, has proven that paralysis of the diaphragm, per se, is not of benefit in bronchiectasis. Because of apparent benefit from both pneumothorax and paralysis of the diaphragm, thoracoplasty for permanent collapse of the involved lobes was tried. Here again, continued observation showed that the bronchi did not change. They remained just as large and had just as much ulceration as before the operation. Collapse therapy, therefore, has been abandoned. A few other types of operative treatment such as ligation of the pulmonary artery to the involved lobe, incision and drainage of lung and bronchi, compression by tamponade, all have been tried. None of them worked.

### *Lobectomy*

Since it was impossible, apparently, to collapse the diseased bronchi, or cure them by intravenous therapy or direct application of chemicals, removal of the involved lung became the goal of treatment. Occasionally, through the first twenty years of this century, lobectomy had been performed for the cure of bronchiectasis; but the mortality rate was so appalling that the operation was abandoned. Beginning immediately after the last war, new attempts were made, and many changes in technique were devised in the endeavor to remove all the diseased lung without a prohibitive mortality. During this period Graham developed his cautery pneumonectomy method and succeeded in relieving many of these patients of the bulk of their diseased lung and bronchi without a prohibitive mortality. The operation, however, was time-consuming, tended to be somewhat deforming, and resulted in many persistent bronchial fistulas which, although a great improvement over their pre-operative condition, was not an ideal solution. Alexander developed his two-stage lobectomy with mass ligation of the lobe causing slough of the lobe with, of course, local empyema and bronchial fistula. Most of these fistulae healed and his results were rather good. Whittemore developed an exteriorization operation with combined thoracoplasty which was effective in removing the greater part of the diseased tissue without a prohibitive mortality. Shenstone, Archibald, Brunn, Coryllos, Lilienthal, and many others contributed variations in technique which gradually reduced the operative mortality and resulted in a high percentage of cures.

During this period of development, pneumonectomy for carcinoma rapidly came to the fore and the technique improved by leaps and bounds. It soon



became apparent that individual ligation of the vessels with meticulous closure of the main bronchial stem resulted in primary healing in a large percentage of cases. Furthermore, thoracoplasty was not necessary even in most instances of total pneumonectomy. Empyema did not necessarily develop and bronchial fistulas became only an occasional complication. This success of individual ligation and meticulous closure of the bronchus led several surgeons to try the same sort of technique for lobectomy. Rienhoff and Blades were among the early ones to work out the anatomical details and operative technique. Under this technique, lobectomy in a single stage operation with primary healing has become the rule rather than the exception. Thoracoplasty is not necessary: the remaining lobe or lobes expand and fill the chest cavity. Mortality rates have diminished so that now it is a relatively safe operation.

I shall not discuss the technique of the operation. You are interested, however, in determining which patients should be referred to a thoracic surgeon for treatment. Certainly, not all patients with bronchiectasis should be operated upon. If a patient by practicing postural drainage can remain comfortable and free of fetor, recurrent hemoptysis and fever, operation would not seem indicated. Their bronchiectasis will never be cured but at the same time it may never progress sufficiently to warrant lobectomy.

It is impossible to predict in many patients what the course of their disease will be. We know that some will continue, without appreciable change for the worse, over a period of several years. Others will tend to go downhill rather rapidly. Children with associated pneumonitis and the development of fibrosis do badly. The obnoxious fetor associated with bronchiectasis will at times almost disappear under postural drainage, while in other patients there will be so little improvement that it is negligible. When continued infection in bronchial wall persists in spite of attempts at drainage, hemoptysis is likely to become a serious symptom.

The complications of bronchiectasis occur fairly frequently. Suppurative pleurisy is not infrequent.

It is quite likely to be an encysted empyema. Amyloid disease occurs after long continued bronchiectasis. It is not different from that which follows other types of chronic infection. Moderate amyloid disease is not necessarily the contra-indication to surgery many have believed, for I have seen moderately severe cases improve markedly after the infection is eradicated.

Brain abscesses are prone to follow bronchiectasis just as they do any suppurative disease of the lung.

#### *Indications for Lobectomy*

Patients who cannot be kept reasonably free of symptoms by occasional bronchoscopic aspiration and postural drainage should be operated upon. These persistent symptoms which are indications for operation are as follows:

- a. Those whose fetor and foul-smelling sputum does not diminish to a point where they are not obnoxious to themselves and others.
- b. Those who continue to have hemoptysis, either persistent small hemorrhages or occasional massive hemorrhages.
- c. Those who have recurring attacks of fever which indicates extension through bronchial wall into surrounding lung. Many of these patients have associated small-lung abscesses which never drain adequately and therefore never heal completely.

The presence of tuberculosis at one time was considered an absolute contra-indication to lobectomy, but it is felt now that bronchiectasis in the tuberculous, resulting from bronchial stenosis, can be benefited very materially by lobectomy, although their chances for getting primary healing of their bronchi are not quite as good as those of the non-tuberculous. Primary healing is being achieved with increasing frequency, however.

The treatment of bronchiectasis is not yet ideal, but great strides have been made in the last 20 years. Many patients are today entirely symptom free who were, prior to operation, practically outcasts from society because of their bronchiectasis.



# Diagnosis and Treatment of Lung Abscess and Acute Empyema

COLONEL GEORGE FINNEY, M.C., A.U.S.

Discussion of the two conditions of lung abscess and acute empyema is rather hackneyed to many. However, the continued high mortality rate of the former, and the fact that chronic empyema still all too often follows an acute empyema, justifies a review of their diagnosis and treatment.

## LUNG ABSCESS

In the discussion of lung abscess, no separation will be made between cases of pulmonary gangrene and abscess, because in the majority of cases, there is no clear-cut dividing line. There is a certain amount of necrosis or gangrene associated with almost all lung abscesses sooner or later. No consideration will be given to abscesses complicating either neoplasms or bronchiectasis.

### *Incidence*

Lung abscess may occur at any time of life, but it is much more apt to occur in males; in some reported series the ratio of male to female cases has been as high as 2:1.

The duration of the abscess is of great importance. In analyzing a number of reported series of cases, it can be seen that many patients recover spontaneously, but the percentage of unsuccessful results increases rapidly with the increase in elapsed time from the onset of symptoms until proper treatment is instituted. There seems to be a general belief that most lung abscesses occur in the lower lobe. This, however, is not borne out by reports of numerous observers.

### *Etiology*

Time will not permit a full discussion of the etiology of lung abscess. However, the two main schools of thought have been based on aspiration and embolism, respectively, as initiating the first step in the formation of an abscess. There are considerable data to support evidence that each does play some part. However, the most important single step in the pathogenesis of the majority of lung abscesses is atelectasis. This may occur in the course of pneumonia if bronchi are plugged with thick exudate or post-operatively if a bronchus is plugged with blood and mucus or foreign material such as vomitus. Under these circumstances, if there are virulent bacteria blocked in the atelectatic lung, abscess is likely to result.

The bacteriology of lung abscess is still not clearly understood. The only definite thing that available

evidence indicates is that there is no one organism which is primarily responsible. Pyogenic organisms of the aerobic and anaerobic type, as well as spirochetes and fusiform bacilli, can all be grown from the sputum and pus. It seems quite likely that this symbiosis is important, because in order to produce chronic lung abscess in experimental animals, it has been necessary to use several different types of bacteria, or bacteria and spirochetes together, in the inoculum.

### *Diagnosis*

The outstanding clinical signs and symptoms of lung abscess are:

1. Cough is present in practically all cases.
2. Pain is present in at least 75 per cent of cases, often early.
3. Fever occurs in more than 70 per cent of cases.
4. Foul sputum is present in nearly 80 per cent and in half of these it may be bloody at times.
5. Physical signs may be characteristic of cavity but in a large number of cases there may be *no* pulmonary signs whatever.
6. X-ray usually reveals an area of increased density at first, then a sharper demarcation followed by a cavity with fluid level.

### *Prophylaxis*

Before we consider the treatment of lung abscess a word should be said about the importance of the preventive aspect of therapy. Because abscess develops in many individuals who have never had proper oral hygiene, it is imperative that proper care be taken to prevent aspiration of foreign material during any surgical procedure. This is particularly true of both surgical and dental operations about the mouth or throat. The simple expedient of raising the foot of the patient's bed and making sure that the bronchi are kept clear by frequent suction with a nasal catheter will prevent many potential lung abscesses. Hyperventilating each patient with carbon dioxide and oxygen at the end of every surgical operation will practically eliminate the possibility of atelectasis and so prevent the stagnation of mucus. A good anaesthetist who is alert to the dangers of lung abscess can thus institute the best prophylaxis. In those post-operative cases of massive collapse of the lung where signs indicate a mucus plug is present causing atelectasis, its immediate removal by bronchoscopy will not only afford necessary relief to the patient but also possibly prevent the formation of an abscess.

### *Treatment*

The treatment of lung abscess naturally falls into either conservative medical therapy, or surgical drainage if the former fails. Because of the fact that a

Given before the Post-graduate Session of the Honolulu County Medical Society, January 14, 1945. Approved for publication. The opinions are those of the writer and do not necessarily reflect those of the War Department.

reasonable number of acute abscesses will heal spontaneously if given a fair trial under an adequate conservative program, this should always be done. When the diagnosis has been established, a comprehensive medical regimen of bed rest and high caloric, high vitamin diet, together with steam inhalations containing creosote and benzoin, should be instituted. Ephedrine and other anti-spasmodics by mouth can be very helpful at times. Early postural drainage is of paramount necessity. Experimentation with different positions will soon show which is most effective in emptying the abscess. It is usually easiest for the patient to be over the side of the bed with his hands on a low chair, with body turned so that the affected side of the lung is highest. Vigorous coughing should be avoided as far as possible. The postural drainage should be carried out at regular intervals, starting with five minutes and gradually increasing the length of time to ten or fifteen minutes, depending on the patient's condition. Potassium iodide or ammonium chloride by mouth can often be used to advantage, but it has been pretty well shown that there is no drug that is in any way specific, because of the mixed bacterial flora. There are a few cases, where spirochetes are present in large quantities, that will react very favorably to the arsenicals if these are given early. Also, the use of the sulfonamides and penicillin in the early stage of pneumonitis will undoubtedly abort many potential abscesses. However, when a true abscess is present, no benefit can be expected from these drugs\*. Whole blood transfusion, particularly in those cases where there is a secondary anemia, can be very valuable and should be used. Bronchoscopy is important for diagnosis and also for ruling out the presence of a neoplasm or foreign body, but its therapeutic value for drainage alone is questionable. There are cases when drainage will be improved by the removal of obstructing granulations and shrinking of the mucous membranes. However, if there is not definite benefit and the patient does not tolerate bronchoscopy well, it should not be persisted in.

In cases of lung abscess where surgical intervention becomes indicated, the procedure of choice in most surgeons' hands is external drainage. This is usually best carried out in two stages. Accurate localization of the abscess is of paramount importance. When this has been done, rib resection with exposure of a fairly wide area of pleura is accomplished and the wound packed open. The area of pleura exposed should be immediately overlying the abscess. The second stage operation is usually carried out after forty-eight hours to insure adhesion of the parietal to the visceral pleura. Then when the abscess cavity is entered, using the actual cautery, there will be no danger of contamination of the main pleural cavity and adequate external drainage can be established. The temptation to put a needle in the chest before

the operation to help localize an abscess should be withstood, because of the great danger of spreading infection. There are a few cases where lobectomy for abscess is indicated and when this is carried out in competent hands the results are very satisfactory. However, such cases are in the minority. The use of pneumothorax or phrenicectomy is mentioned only to be deprecated.

There is still considerable controversy regarding the time when surgical drainage should be instituted. This requires the careful consideration and keen judgment of both the physician and the surgeon. In general, it is felt that if a proper medical regimen has been carefully carried out for a period of three weeks without showing a definite satisfactory response, surgical intervention is indicated. When we examine reports of the treatment of lung abscess from various clinics we find that the percentage of unsatisfactory results rises rapidly as the duration of treatment goes beyond six weeks. It should also be noted that peripherally located abscesses are less apt to clear up under medical management and are more amenable to operation. Surgery should therefore be resorted to earlier in the treatment of this type of abscess than in the centrally located ones, in which the medical regimen is more apt to prove effective and surgery more hazardous.

As stated earlier, results in the treatment of lung abscess as a whole are still not satisfactory. It should be noted that Neuhof has been an advocate of early surgical intervention and undoubtedly surgical intervention has been put off too long in many cases.

#### ACUTE EMPYEMA

Since the advent of sulfonamides and penicillin the incidence of acute empyema has been cut down considerably. However, acute empyema still occurs often enough to concern both the physician and surgeon in its diagnosis and proper treatment, with a view to reducing the morbidity and the number of chronic empyemas that may develop.

#### *Etiology*

There are, in general, two main types of acute empyema. There is the localized pocket or encapsulated type, usually caused by the pneumococcus secondary to pneumonia. This pocket may be peripheral at some point against the parietal pleura or it may be interlobar or against the mediastinum. Then there is the massive type. This may be a diffuse pleuritis causing the formation of large quantities of fluid with very little fibrin, as is usually the case when the infecting organism is the streptococcus. Post-pneumonic pneumococcal empyema may also be massive, with very thick pus containing large amounts of fibrin. An empyema resulting from a wound of the thorax will be as a rule of the massive type, particularly if a hemothorax becomes infected.

Acute empyema may occur at any time of life, and there is no appreciable difference in its incidence in the two sexes. The most common etiologic factor in

\*Recent reports indicate favorable results from penicillin in aerosol form.—Ed.



civilian practice is of course lobar pneumonia, while in war surgery secondary infection occurring in wounds of the chest may be (though it seldom is) responsible for the development of empyema.

The bacteriology of acute empyema is well understood and is of considerable importance. This is true both in its relationship to prognosis and also because the type of surgical treatment and the time it should be instituted depends to a great extent on the type of infecting organism. The most common organism found in cultures of empyemas is the pneumococcus. The streptococcus is present in pure culture in a certain number of cases. However, particularly in empyemas developing as the result of trauma, a mixed flora may be present and there may be both aerobic and anaerobic types. Further consideration will be given to the bacteriology when treatment is discussed.

### *Diagnosis*

The outstanding clinical signs and symptoms of acute empyema are:

1. Development of a septic type of fever.
2. Dull to flat percussion note with diminished or absent tactile fremitus.
3. Distant or absent breath sounds.
4. Limitation of respiratory excursion on the affected side together with displacement of the mediastinum toward the opposite side.
5. X-ray findings may be characteristic of fluid, but many times, in those cases where the clinical signs of fluid are equivocal, x-ray findings are likewise.
6. The aspirating needle is the best means of making a positive diagnosis; it should be used in every case where fluid in the chest is suspected.

### *Prophylaxis*

Just as the preventive aspect is so important in the consideration of lung abscess, so also is this true in acute empyema. Adequate chemotherapy when instituted early in the pneumonias has without doubt cut down the incidence of acute empyema to a marked degree. Also its prophylactic use together with large doses of penicillin in various types of thoracic war wounds has prevented secondary infection to such an extent that very few hemothoraces develop into empyema. Also, large wounds of the thorax can be closed and treated conservatively with very little danger of secondary infection. By the combined use of the sulfonamides and penicillin many potential empyemas have been aborted.

### *Treatment*

Much has been written about the treatment of acute empyema in the past. For the most part the discussion revolved around the question as to whether some form of closed drainage of the empyema had a lower

mortality rate than open drainage with rib resection. This question, like so many others of its type, has not been answered to the satisfaction or agreement of all surgeons. However, it has been demonstrated that mortality rates depend more on the virulence of the infecting organism and the presence of further complications rather than the type of surgical drainage employed, provided the drainage is adequate. There are certain principles that must be followed in order to obtain the maximum of results.

In the first place, the empyema that proves to be a surgical emergency is the exception. Aspiration of the cavity will not only serve to relieve respiratory embarrassment if that is present, but it will also allow culture of the fluid so that the bacteriology can be definitely determined. In a certain percentage of cases, particularly where the hemolytic streptococcus is the infecting organism, repeated aspirations together with proper chemotherapy will give excellent results. However, the chances of effecting a cure in pneumococcal empyemas by repeated aspirations, even though adequate chemotherapy is being carried out, are not good. Therefore, aspirations alone as surgical treatment should be repeated only until thick pus has developed provided the fluid did not clear up entirely and disappear. When frank pus is present adequate drainage should be established. As a result of using both closed drainage of some type in certain cases and open drainage with rib resection in others, the following principles of treatment have been established. In encapsulated empyemas, and particularly in those that are in an interlobar space, open drainage with rib resection is the treatment of choice. In massive empyemas, unless there are anaerobic organisms present, some form of adequate closed drainage is usually preferable. The word adequate is stressed because simply inserting a rubber tube in a cavity and expecting it to drain properly is not adequate. In those cases where there is an anaerobic infection, open drainage should be instituted immediately. In closed drainage the use of normal salt solution or Dakin's solution for irrigation, where there are thick fibrin clots, is very effective to help insure proper drainage.

There are a few specific facts that should be kept in mind in the surgical treatment of acute empyema whether closed or open type drainage is used. Do not establish wide open drainage until there is good evidence that the mediastinum is fixed. Any tube that is used for drainage should be anchored so there is no danger of its loss in the cavity. Inadequate or non-dependent drainage are the two most common causes in the development of chronic empyema. The morbidity and mortality rates will be cut to a minimum if proper, adequate drainage is established soon after a frank acute empyema has developed.



# Hemorrhage from Meckel's Diverticulum in Infancy

## REPORT OF A CASE

WILLIAM B. PATTERSON, M.D.

Puunene, Maui

Meckel's diverticulum is estimated to occur in from 2 to 4 per cent of all infants, though it rarely causes any symptoms. At times, however, it does produce symptoms and gives rise to pathological conditions within the abdomen. The tip of a Meckel's diverticulum may become attached in the abdomen and produce intestinal obstruction. The diverticulum may become inflamed and produce the signs of acute appendicitis. It may invert itself into the lumen of the ileum and lead to intussusception. It may develop ulceration which may perforate and cause peritonitis. There may be massive hemorrhage from the ulceration which can be fatal if unchecked. All of these conditions except hemorrhage will be accompanied by signs and symptoms that will necessitate an exploratory abdominal operation.

Hemorrhage from the bowel may be the only symptom of a Meckel's diverticulum. Physical examination of a patient with a bleeding Meckel's diverticulum will be negative except for signs of anemia. Examination of the blood will show anemia but no other abnormality. X-ray of the gastro-intestinal tract is usually normal. The hemorrhage may show as a tarry stool, but if it is massive, and in an infant, it may produce a red, liquid stool. Sometimes blood clots will form in the stool when a large hemorrhage occurs. If there are repeated small hemorrhages a severe secondary anemia will develop. If the hemorrhage is large the patient may go into shock and die if not properly treated. The following case is recorded to illustrate the need for immediate transfusion and abdominal operation in infants with massive intestinal hemorrhage for which no cause can be found.

### CASE REPORT

R. N., male, weighed 9 pounds 2 ounces at birth and appeared normal. His mother had syphilis but received adequate treatment during pregnancy. He attended monthly baby clinics and developed normally for the first eight months. At this time the mother reported that his stools were very dark in color. This was thought to be of dietary origin. The mother was told to bring him to the clinic if the dark stools continued.

All was well until eleven months of age, at which time he passed a large bloody stool. I saw the diaper he was wearing at the time and there was no doubt that the stool consisted almost entirely of blood. The mother stated that he had had a normal bowel movement twelve hours previously and had not been ill. The temperature was found to be 101 F. and the skin was pale and clammy. His pulse was very rapid. Otherwise the examination was negative. He was given 1/32 grain of morphine sulphate and 1 mg. of vitamin K hypodermically.

A blood count revealed 38 per cent hemoglobin and 2,700,000 red cells. The white blood count was 13,400 with 15 per cent neutrophils and 85 per cent lymphocytes. The coagulation time was two minutes and the bleeding time was one-half minute. The blood was type A. The urine was normal.

The patient was observed for twelve hours and was given a milk diet. During this time his condition grew worse, although he did not have another bowel movement. The respirations were thirty-four per minute and the skin was paler. He was given 165 cc. of whole blood in a scalp vein. His weight was 19½ pounds. After the transfusion he appeared much improved and his lips were of a better color. The next day his condition was improved and his temperature was normal though his hemoglobin was only 67 per cent of normal. He still had not had a bowel movement since just before admission. He was given another transfusion of 195 cc. of blood and just as this was finished he passed a large bloody stool estimated at 400 cc. During the next four days his condition was good and he had no bowel movement. On the fifth day after the last bloody stool he passed a normal stool with no gross blood in it.

The patient was seen from the onset of his illness by a surgical consultant. The possibility of a bleeding Meckel's diverticulum was discussed though it was deemed advisable to postpone operation until definite cause could be found for the bleeding. During the next three weeks there was only one bloody stool, though the hemoglobin did drop to 57 per cent of normal. During this period the baby was fine except for occasional cramp-like pains in the abdomen. Digital rectal examination was negative. X-rays of the entire gastro-intestinal tract were negative. The blood Wassermann reaction was negative. He took a regular diet for his age during this period. Finally, after three weeks, he was allowed to go home with the instruction to return immediately if any blood appeared in the stool. He was given a liquid medicine to take which contained liver extract and ferrous sulphate.

During the next three months he returned to the clinic at ten-day intervals for examination and hemoglobin determination. The hemoglobin gradually rose until it reached 75 per cent of normal. His general condition gradually improved, though he did not return to normal. He gained only one pound during the four months following the first bloody stool. He was unable to stand alone although he was over fifteen months of age. While at home no gross blood was ever seen in the stools though a few specimens of stool did contain a small amount of blood by laboratory test.

At fifteen and one-half months of age he passed another large bloody stool. Following this his hemoglobin dropped to 55 per cent of normal. He was prepared for operation by a transfusion of 100 cc. of blood and by four doses of 3¾ grains (0.25 grams) of sulfadiazine by mouth at four-hour intervals preceding the operation.

At operation, through a low midline incision, a Meckel's diverticulum was found at the usual location on the ileum. The ileum distal to the diverticulum, and the colon, were filled with blood. There was an adhesion near the base of the diverticulum. The diverticulum was removed and the intestine was closed with three layers of sutures. In the

fresh state the diverticulum showed a firm blood clot attached to the mucosa near the base.

Immediately after the operation the patient was given 250 cc. of blood. His condition was good and remained good. He was bothered by abdominal distention but this was relieved by suction through a Levine tube. He was given sulfadiazine post-operatively. His temperature fluctuated between 100 F. and 102 F., and after the third day he was given 5000 units of penicillin every three hours for three days. Following the institution of penicillin treatment his temperature dropped to normal and he made an uneventful recovery. He went home on the tenth post-operative day.

The tissue specimen was fixed in formalin and was sent to Dr. I. L. Tilden for study. He described it as a small structure, 3 cm. long and 1 cm. in diameter, with a lumen 5 mm. in diameter. Microscopically, the structure was lined by thickened bowel mucosa. There was evidence of chronic inflammation, with fibroblastic proliferation and collections of lymphocytes. He was unable to demonstrate either an ulcer or a bleeding point but stated that it was very difficult to demonstrate a bleeding point after formalin fixation. Diagnosis: Meckel's diverticulum with chronic inflammation.

After going home the patient continued to improve. In the three months following operation he gained three pounds of weight. He began walking at eighteen months of age and now appears normal though small for his age.

#### SUMMARY

1. A case of massive hemorrhage from a Meckel's diverticulum in an infant is reported. The first hemorrhage apparently occurred at eight months of age.
2. The only symptom and sign of a Meckel's diverticulum may be profuse hemorrhage from the bowel and secondary anemia.
3. The only treatment for hemorrhage from a Meckel's diverticulum is prompt transfusion of whole blood and surgical removal of the diverticulum.
4. In the surgical removal of a Meckel's diverticulum, the incision should be made transverse to the lumen of the ileum and it should be closed transversely to prevent the later development of intestinal obstruction. Care should be taken not to remove any of the ileum.
5. Delay in the removal of a Meckel's diverticulum after it begins to bleed leads to chronic secondary anemia which retards growth and development.

# HAWAII MEDICAL JOURNAL

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## EDITORIALS

### THOUGHTS OF A DOCTOR WHILE AWAITING RED TAPE UNWINDING IN THE LOCAL O.P.A. TIRE RATIONING OFFICE

He had rushed through house calls the previous morning in order to have his badly worn tires inspected and approved for replacement.

Between hospital rounds and office hours he had sandwiched in a visit to the O.P.A. office to arrange for the tire replacements.

He had arrived there at 8:45 A.M., only to discover that the O.P.A. office now opened up for business at 9:00. (Outside of government employees, most people he knew started the day's work by 8:00 or at least by 8:30; he had started at 6:30.) So he sat on the steps and waited, filling out a long and tedious questionnaire as he did so.

Then—although the inspector's report indicated his tires were dangerously worn—he was told no one in the office was qualified to pass on the application, but the Board (fortunately) was meeting that day and would consider the matter. He could return the next day for the necessary document which would permit a dealer to sell him tires. No, the office could not (or would not?) mail this to him; the doctor must make another trip ("was this trip necessary?") next day to pick it up.

So next morning—this was the third day—he postponed a house call on a sick child to revisit the tire rationing office. He could have saved time and mileage by stopping in on his way from one hospital to another had the office been open when most private business offices open; but it wasn't.

One of the office employees leisurely rose from her desk, took a final drag on her cigarette, put out the fire, snapped the butt through an open window, then asked what the doctor wanted.

She wasn't the lady he had talked with the day before, and expressed some astonishment when he said he had filed his application the previous day and expected a permit to buy tires today. "Why, our Board just *met* yesterday afternoon!" Then, "Oh, are you a doctor? Wait a minute."

So he sat, while a couple of other girls rummaged through a foot-high stack of forms, questionnaires, and God-knows-what. (Just how did anything ever get done back in the good old days before bureaus and bureaucrats developed their technic for producing forms and questionnaires?)

And the doctor sat on a wooden bench and waited, and while he waited he mulled over in his mind the compulsory health insurance scheme which is part of the Wagner-Murray-Dingell bill now pending in Congress, and pondered on its implications.

With the working of an office of a government bureau unfolding before his nose he couldn't help comparing two processes: (1) how he used to buy tires, and (2) how he bought them now. He used to call up a dealer of his choice and tell him he needed new tires. The dealer, glad to have his business, sent for the car, put on the tires, and sent in his bill; it was paid, and that was that. Now—well, the government had moved in between. With the rubber shortage, there was reason and need for it, to be sure. But *when* the government moved in, a simple process which used to take an hour or so now required three days, three two-mile auto trips, endless forms to fill out, the action of a board, and the functions of an office staffed with "servants of the people" observing bankers' hours.

The two processes, the old and the new—or, in regard to sickness, the present method of getting taken care of and the one proposed—came back to mind. Now, if someone is sick, he goes to a doctor and the doctor is responsible to him. If the doctor doesn't give him good service, or fails to help him, he goes



elsewhere. That's an incentive for the doctor to give all he's got, or he won't have any practice. And it is still a good old-fashioned custom in most communities for the doctors to take care of the sick first, and take up the matter of payment later.

How will a person get medical care under the Wagner-Murray-Dingell act? Senator Wagner says everything will be just as it was. BUT THE GOVERNMENT WILL BE IN BETWEEN! Just as the ration board is between the doctor and his tires—and let no one think for a moment that that won't include all the delays, red tape, questionnaires and petty interferences that are part and parcel of about every governmental bureau one can name.

What about the doctor's responsibility? Today it is to the patient, directly and absolutely. Under Senator Wagner's bill, the doctor's responsibility will be to the government, to whom he will look for his pay. He will do as "the government"—meaning any or all of the little people who have the say-so in a government office—says. His chance of advancement in his profession, his very livelihood, will depend on his playing ball with the political or bureaucratic powers-that-be. Maybe that's all as it should be—but will the patient be better or worse cared for under such a system?

Selling a political ideology to the masses under the old malarky that they are going to get something for nothing seems to be the order of the day.

There are even handouts to the doctors themselves in Mr. Wagner's bill, and some doctors will undoubtedly fall for them.

Beware the politicians bearing gifts!

Look all the way down a Trojan gift horse's gastrointestinal tract!

There are ways of correcting the at present imperfect distribution of medical care, other than turning it over to the bureaucrats to administer.

The people have had an opportunity to learn a lot about government intervention in their private lives during this war. When the needs imposed by the war are gone, will they forget the lessons they've been taught, and have to learn them all over again the hard way?

P.S.: The doctor got his tires, but was an hour late to his office, and were the patients mad!!

#### NO CHAGAS' DISEASE IN HAWAII

To the Editor:

Enclosed, for your information, is a report which Dr. David Bonnet, the entomologist who is employed

by the health department, has made on the question of Chagas' Disease in Hawaii, after considerable study of this matter.

It seems to me that Dr. Bonnet's conclusions that the presence of *Trypanosoma cruzi* here is unproven and extremely doubtful, are well founded. We should not, however, completely close our minds to the possibility.

C. L. WILBAR, JR., M.D.,  
President, Board of Health

#### TERRITORY OF HAWAII BOARD OF HEALTH DENGUE MOSQUITO CONTROL

August 20, 1945

TO: President, Board of Health  
FROM: Entomologist, Dengue Mosquito Control  
SUBJECT: The Question of Chagas' Disease in Hawaii

1. Recently, considerable discussion and speculation has centered around the verbal report of Lt. S. F. Wood, Entomologist, 4th Marine Division, that he had found *Trypanosoma cruzi* in the local species of Reduviid, *Triatoma rubrofasciata*.
2. Dr. Walter Carter, Entomologist for the Pineapple Experiment Station, reported at the July meeting of the Hawaiian Entomological Society for Lt. S. F. Wood that this trypanosome had been identified as *Trypanosoma cruzi* and that Dr. H. Arnold, Jr., and Dr. D. Bell had previously reported cases now believed to be Chagas' disease. (HAWAII MED. J. Vol. 3, Jan.-Feb., 1944.)
3. An intensive search was made for specimens of *Triatoma rubrofasciata* by myself and Bernard Brookman, P. A. Sanitarian (R) USPHS, and none were discovered. However, Mr. K. Sakimura of the Pineapple Research Station sent to me two nymphal forms. This species has been found principally in the Kaimuki district, but it has been also reported from Manoa and Nuuanu Valleys. I have been informed by Mr. E. C. Zimmerman, Entomologist of the Bishop Museum, that *Triatoma rubrofasciata*, an Oriental species of tropicopolitan distribution, has been found only on the island of Oahu in the Territory of Hawaii.
4. At the August meeting of the Hawaiian Entomological Society (August 13, 1945), Dr. Walter Carter presented for Lt. Wood a paper on this subject to be published in the proceedings of the Hawaiian Entomological Society for 1945. In this paper the trypanosome found in the gut of

*Triatoma rubrofasciata* from Hawaii is identified as *Trypanosoma conorhini* (Donovan). This trypanosome was originally described by Donovan (1909) from specimens of *Triatoma rubrofasciata* in India. It has since been reported harbored by this species of *Triatoma* in Java, Formosa and Mauritius. *Trypanosoma conorhini* is non-pathogenic, at least to rats and mice. The vertebrate host has been reported to be the house rat.

#### 5. Summary and Conclusions.

(a) *Triatoma rubrofasciata* is found only on the island of Oahu in the Territory of Hawaii and in rather limited numbers. It is principally known from the Kaimuki District of Honolulu. This species is a cosmopolitan species and was probably introduced into Hawaii from the Orient. It is difficult to understand how a species of Oriental origin could become infected with the South American trypanosome, *Trypanosoma cruzi*. *Trypanosoma conorhini*, which has been described from this species of *Triatoma* in Formosa, Mauritius, and India, is very similar in appearance to *Trypanosoma cruzi* but possesses no leishmania tissue phase in mice, rats, and guinea pigs and has an extremely short vertebrate host cycle in the rat.

(b) *Trypanosoma cruzi* has not been found in the Territory of Hawaii; and hence, the presence of Chagas' disease, which is caused by this protozoan, is unproven and extremely doubtful.

Respectfully submitted,

DAVID D. BONNET  
Asst. Sanitarian (R) USPHS  
Entomologist, Dengue Mosquito Control

#### VENEREAL DISEASE CONTROL:

##### AN INTERIM REPORT

The following table gives the numbers of cases of gonorrhea, and primary and secondary syphilis, reported to the Hawaii Territorial Board of Health from Army, Navy and civilian agencies as having been acquired on Oahu during each of the months indicated. The periods covered are the nine months preceding, and the nine months following, the closing of the houses of prostitution on September 21, 1944.

MONTH	GONORRHEA	SYPHILIS	MONTH	GONORRHEA	SYPHILIS
Jan. ....	90	1	Oct. ....	88	3
Feb. ....	91	5	Nov. ....	74	5
Mar. ....	93	3	Dec. ....	53	4
Apr. ....	74	2	Jan. ....	68	3
May ....	120	13	Feb. ....	57	3
June ....	75	5	Mar. ....	43	5
July ....	65	7	Apr. ....	31	1
Aug. ....	116	4	May ....	53	3
Sept. ....	115	10	June ....	50	1
	—	—		—	—
TOTAL ..	839	50	TOTAL ..	517	28

#### ALOHA, CAPTAIN PLEADWELL

As this issue goes to press, Dr. Frank Pleadwell, Captain (Medical Corps), United States Navy (Retired), is leaving Hawaii for an extended Mainland trip with Mrs. Pleadwell. He expects to return to the Territory, but does not yet know how soon this will be.

Dr. Pleadwell has been an active and interested member of the Editorial Advisory Board of the HAWAII MEDICAL JOURNAL since the Board was established in September, 1943.

Dr. Hastings H. Walker, Director of Leahi Hospital, will take Dr. Pleadwell's place on the staff of the JOURNAL.

# COUNTY SOCIETY REPORTS

## HAWAII COUNTY MEDICAL SOCIETY

The 240th regular monthly meeting was called to order by Dr. R. Eklund at 7:15 P.M. on July 5, 1945, in the Hilo Memorial Hospital Staff Room. Fifteen members and 11 guests were present. The minutes were accepted and filed.

The secretary read a communication from the executive secretary of the Territorial Medical Association, which answered our query regarding the status of the medical library in the Mabel Smyth Building. This is a Honolulu County Medical Library and receives its chief support from the donation of fees paid to Honolulu County doctors for treatment of indigent cases. The letter suggested that the councillors might bring up at the next annual territorial meeting the question of dividing the annual contribution from the Territorial Association among the active county medical libraries.

Two movies were shown—*Human Sterility*, sponsored by the local Board of Health, and *Vitamin Deficiency*, presented by Squibb & Sons.

Since this was his last meeting before departure for his new assignment on the Island of Molokai, our president, Dr. Eklund, bade farewell to the society and Dr. Leslie, vice president, assumed the chair. Dr. Leslie announced a special meeting to be held in honor of Dr. Eklund on July 7 at Hilo Country Club.

The meeting adjourned at 9:20 P.M.

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A special dinner meeting was held at the Hilo Country Club at 7:30 P.M. on July 7, 1945. Eighteen members and 4 guests were present to wish good luck to our former president, Dr. R. Eklund.

Three movies were presented by the local Board of Health. Dr. Yoshina led the discussion following the first movie, which was on differential diagnosis and therapy of vomiting in the newborn. The second picture was on eye surgery and Dr. Crawford commented on it. Dr. Yoshina also discussed the third film on the subject of laryngeal obstruction.

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The 241st regular monthly meeting of the Hawaii County Medical Society was held in the Hilo Memorial Hospital Staff Room on August 2, 1945. Dr. W. Leslie called the meeting to order at 7:40 P.M. Seventeen members and guests were present. The minutes were placed on file.

An invitation to a dinner meeting for Capt. Borst, Commanding Officer of Corps Evacuation Hospital

No. 1 was extended to the society by Commanders Hale and Sterner. It was decided that this meeting should be considered as the regular September semi-annual medical meeting of the society.

Mr. Reginald Carter of the Hawaii Medical Service Association outlined the work of that organization and the plans for establishing a similar association in Hilo.

It was moved that this society go on record in favor of such a plan for the Island of Hawaii and sponsor the proposed association with the assistance of Mr. Carter. The president appointed Drs. Sexton, Crawford and Orenstein a committee to sponsor such an association. Mr. Carter and three local business men will be added to the committee. Mr. Carter also asked that the present officers of the Hawaii County Medical Society serve on the committee for the time being.

Dr. Larsen announced that a definite plan for a skin clinic, sponsored by the Plantation Physicians' Association, is now in the hands of the managers. It is planned that Dr. Johnson, the consultant, will make regular clinical visits to this island, during which a day will be allowed for private consultations.

Meeting adjourned at 9:30 P.M.

S. MIZUIRE, M.D.,

Secretary

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## MAUI COUNTY MEDICAL SOCIETY

The regular meeting of the Maui County Medical Society was held August 21, 1945.

Members present were Drs. Von Asch (presiding), K. Izumi, Patterson, Kushi, Kanda, Rothrock, Osmer, T. P. Chou, Ellen Chou, McArthur and Sanders. A large number of Marine and Navy doctors came as guests.

It was decided that fees for the pre-marital examinations required by law should be determined by the individual examiners, based on the extent of the examination. No fee is allowed to government physicians for making such examinations.

Two sound films were shown, one on *Modern Nutrition*, the second on *External Skeletal Fixation of Fractures of Tibia and Os Calcis*. The latter was presented by a Navy doctor, who also gave a paper and led a discussion on the same subject.

JOHN SANDERS, M.D.,

Secretary



# NEUROPSYCHIATRIC COMMENT

## CIRCUMSCRIBED NEURODERMATITIS

Circumscribed neurodermatitis is one of the commoner dermatologic problems, and one of the most difficult to manage. It can seldom be cured by treatment of the skin alone, and many patients consequently suffer from it for years in spite of repeated visits to many doctors. It can often be controlled, however, and occasionally cured, if the physician recognizes it and bases his treatment on rational grounds.

### The Neurodermatitides

"Neurodermatitis" is an ill-defined term which means various things to various men. It implies in general a pruritic dermatosis based on non-organic dysfunction of the central nervous system. In this country, it is usually divided into three main categories: disseminated neurodermatitis, acute exudative neurodermatitis, and circumscribed neurodermatitis.

*Disseminated neurodermatitis* is used in some schools as a synonym for atopic (flexural or infantile) eczema, and in some as a synonym for multiple and widespread lesions of circumscribed neurodermatitis. It has not, in general, been sufficiently clearly defined to be a very useful term.

*Acute exudative neurodermatitis* is an acute and severe, often widespread, eczematous disorder, which would require a monograph for its description: it is most often diagnosed by exclusion of the first-suspected physical or chemical causes. It is clearly described and well illustrated in Becker and Obermayer's *Modern Dermatology and Syphilology*.

*Circumscribed neurodermatitis* is by far the commonest of the three varieties of the disease; it has gone by various names—eczema papulosum, lichen simplex, lichen Vidal, lichen simplex chronicus, pruritus, pruritus vulvae, and pruritus ani.

### Diagnosis of Circumscribed Neurodermatitis

*Paroxysmal pruritus* is the most valuable diagnostic feature of the disease. It is almost invariably the chief complaint, and it is rarely met with in any other disease. The paroxysmal feature of it is the important thing; and by this is meant three things: the itching is (1) *severe*, (2) *intermittent*, and (3) usually *abrupt in onset*. It is almost always so severe that the patient is compelled to scratch or rub the itchy place, often violently; it is entirely absent for periods of several hours at a time, especially when the patient is

pleasurably occupied; and the onset of paroxysms is frequently so abrupt that it actually makes the patient jump. The patient will often confess, sometimes sheepishly, that there is a lot of pleasure obtained by scratching, and a sensation of relaxation and relief afterward. The analogy with the sexual orgasm is obvious.

*Circumscribed lichenification* is the second most characteristic feature of the disease; it is so characteristic that, like the pruritus, it may actually be diagnostic. The lesion usually has a clearly demarcated edge, which is frequently slightly elevated and is likely to be smoothly curved, forming an oval plaque. This plaque is typically lichenified, that is, thickened in a leathery fashion, with its surface cross-hatched by the rhomboid pattern of the interfollicular lines of the skin. The depth of these lines is exaggerated. There are often punctate excoriations, especially in early cases. Increased pigmentation is common.

*Site of involvement* is highly variable, but the sides or back of the neck; the shin; the forearm; the elbow, knee, or ankle flexures; and the genital and perianal regions, are much more often involved than all other areas together. The face, scalp, palms and soles, and trunk are rarely involved.

*Histologic changes* may be useful, though they are rarely necessary, in excluding alternative diagnoses. The histologic changes are not absolutely diagnostic. They most closely resemble those of psoriasis: rather uniform acanthosis (thickening of the epidermis with regular, orderly elongation of the rete pegs) and hyperkeratosis, often with parakeratosis. There is a moderate to marked round-cell infiltration of the corium, usually with more eosinophiles than one finds in psoriasis.

### Etiology

Although the *Standard Classified Nomenclature* still lists this disorder under "diseases of unknown or uncertain etiology," it seems fairly clear that many if not most cases of it are an expression of emotional tension or conflict. Stokes has discussed this aspect of the problem fully and well, and his paper (*J.A.M.A.* 105:1007, 1935) should be read for a more nearly adequate understanding of the subject. The monotonous regularity of failure of topical applications alone, and of relapse after x-ray therapy, makes it fairly plain that there is much more to the disease than meets the eye. The frequency with which the disease is observed in tense, high-strung, high-pressure peo-

ple, people with a high standard of behavior, or people on whom heavy demands for performance or adjustment are being made, is striking, and leaves little room for doubt that the disorder is not merely somatic but pre-eminently psycho-somatic. It is as if the pruritus were a safety valve with which to release excess emotional steam; or, to put it in another way, as if the skin were serving as whipping-boy for an emotional problem—the patient gratifies his urge to solve the problem, by scratching the itch instead. As previously mentioned, the parallel with the sexual orgasm is a close one, so close, indeed, that patients not infrequently are visibly embarrassed by their realization of the similarity. The frequency of involvement of the genital and anal regions is probably significant in this regard, as is the frequency with which unsatisfactory (or lacking) sexual relationships are discovered as potential or actual causative factors.

### Treatment

Treatment falls under two headings: topical symptomatic measures, and psychiatric measures. It is important to realize, *and to convince the patient*, that *local treatment is not likely to effect a cure*. To be sure, it occasionally does effect a cure, but this is unusual and should not be relied upon. This conviction can usually be imparted to the patient simply by explaining the etiology of the disease.

The aim of topical treatment is symptomatic relief. Three kinds of topical measures have value: (1) antipruritic and keratolytic preparations (crude coal tar paste or varnish is one of the best; White's formula, or 5 per cent crude coal tar in chloroform, is suggested); (2) x-ray therapy (75 or 100 roentgens unfiltered or lightly filtered, once a week, or double this dose once every two weeks, for a month or two, may be tried), or (3) vigorous maceration of the lesions every two or three weeks with a stout gauze swab wet with 20 per cent potassium hydroxide solution, until the skin is sore, following which it is mopped with boric acid solution, blotted dry, and

dressed daily with boric acid ointment until it is healed. This last method is not suitable for anogenital lesions.

Psychiatric treatment is usually required for permanent relief. It involves principally discovering, by questioning the patient, situational factors which may lead to emotional conflict and tension. It may be possible for the general practitioner or dermatologist to accomplish this in his office, with an intelligent patient and adequate skill and good luck; however, the patient is often unconscious of any etiologic factors, and reference to a psychiatrist may be required. It is difficult to know how many cures are accomplished by psychiatric treatment, but it is not at all difficult to know how many lives of "quiet desperation" are brought to the attention of the psychiatrist by reference of these cases. It is very rare for such a reference to "draw a blank," so to speak.

### Prognosis

The prognosis for these cases by the all-too-common practice of going from doctor to doctor in search of the "right" topical application is clearly exemplified by the average victim of pruritus ani or pruritus vulvae. It is very poor indeed. Chronicity is the almost invariable rule.

Follow-ups are difficult, and seldom obtained, and so the prognosis *with* psychiatric management has not been established; but the prompt relief observed in the occasional case suggests that success is at least as frequent as failure. At all events this approach to these cases is a constructive one, calculated to help them generally; whereas the old hit-or-miss method of searching for the proper ointment or lotion is fairly certain to be a failure, and even x-ray therapy is so uncertain, and so likely to eventuate in x-ray dermatitis, that it cannot be recommended except for the occasional desperate—or very elderly—patient.

HARRY L. ARNOLD, JR., M.D.

The Clinic, 881 So. Hotel St.

# HOSPITAL NEEDS

## THE CONVALESCENT-NURSING HOME

In the January-February, 1944, issue of the JOURNAL an article was written under the caption, "The Question of a Convalescent-Nursing Home." Today, though the answer is not yet an actuality, there is no longer any question.

The analysis made by the County Medical Society in the spring of 1943 established the need. In the intervening months there have been discouragements and postponements and bogged-downedness; a flare-up, a dying down; a blowing hot, a cooling off; property within grasp, property withdrawn; and over all the tensions consequent to the War; but the flame never quite went out, and at the moment it is burning brightly. As was to be expected, the War was our greatest deterrent to carrying through at an earlier time. Not only were we aware of strains and stresses, but labor and material were non-existent. Looking back, we can see that the very difficulties we encountered were but strengtheners; fighting resistance carried us through.

For one thing, in the beginning the opinion concerning the need of a convalescent-nursing home was not a unanimous one; even the doctors were not altogether in accord, as they seem to have since become; more time was required for the idea to soak in and develop. All the while three questions persistently came to us in one form or another, came from doctors, patients, families and the community at large; nor were there any answers: where can a patient go who needs long convalescence but who no longer needs hospitalization? The residence of such a patient may be a hotel; even if he lives in his own home, there may be no one in it who can give him the required care. He is perhaps getting depressed, or too dependent on the hospital, and he needs, therefore, a more stimulating environment to bring him back to normal. Where can one stricken in the prime of life get adequate care? He may live many years but as a semi-invalid. And finally the third question: where can elderly people have the kind of attention they require? Some of them are occupying hospital beds needed by those who are acutely ill, some are living alone in hotels, or in their own homes or with their families, but the families have come to feel the strain is too wearing, especially where there are young folk under the same roof.

Many a time when the light was burning low, nigh to going out, when it seemed as though the ob-

stacles were too many and we were on the verge of giving up, a doctor would call or a patient grow anxious or a tired relative would plead, and we would spark again. And so through all the vicissitudes since the spring of 1943, we have kept the light burning even though at times it was no more than a flicker.

The enforced waiting has made for unanimity of opinion, throughout the community. For months we haven't, as we did in earlier days, met with negative ideas—everywhere and on all sides we find approval: doctors, business leaders, organizations, churches, the man in the street and the press are unanimous now in their belief that a convalescent-nursing home should be established.

In the early days of our endeavors we thought the first essential was a site, the second incorporation. We have reversed the order and on September 24, 1945, under the laws of the Territory, the Convalescent-Nursing Home was incorporated. The following were the incorporators: Messrs. Riley H. Allen, Stafford L. Austin, Raymond S. Coll, Sr., Cyril F. Damon, Alan S. Davis, Peter K. McLean, George H. Moody, C. T. Oliphant, C. Dudley Pratt, Alva E. Steadman, Miss Mary Catton and Dr. F. J. Pinkerton.

As a charter and by-laws require directors, these same persons will so act. Later, when the home is established, there will be some change in the directorate. It calls for a minimum of 9 and a maximum of 19 persons. Since September 24, the following have also been added as directors: Bishop H. S. Kennedy, Bishop Jas. J. Sweeney, Reverend Allen Hackett, Mr. Ralph E. Woolley, Mr. Henry Inn, Mrs. Mark Robinson and Mr. Scott Brainard.

Incorporation has given legal sanction to the idea of a convalescent-nursing home, and makes possible the acceptance of funds against the time we can actually acquire property. At the moment we have no site, and the name, "Convalescent-Nursing Home" is merely an expedient for corporeity. We think that later we will be able to find a more pleasing name, perhaps one suggested by the very site that is chosen for the Home.

We think in terms of 100 patients, or boarders, to begin with, and of sufficient acreage, not only in the interest of normal expansion but to make possible a division between age groups as well as between



convalescents and the chronically ill. We envision a home that will breathe beauty and peace and comfort. Attention will be given to suitable programs. The younger patients and convalescents will be encouraged to participate in activities suitable to their particular conditions, but sufficiently active to stimulate independence and a desire for normal health, emotional as well as physical. For the aged there will be a more passive regimen in a quieter part of the Home, one which will offer suitable diversion but most of all will give them a sense of security and loving care to the end of the road.

Though nothing has been decided in this regard, some of us envision a large central administration building where those needing most attention will live, and in landscaped grounds there will be units for those needing less attention or for aged couples, financially independent, but who no longer want the worry of maintaining their own larger homes—worry of servants, taxes, repairs, etc. Such couples may build and equip cottages approved by the directors, which will give them the privacy of a separate home without the burden of its upkeep. After they have gone, the units will revert to the Home.

The Home will not be under the control of any vested interests; it will have its own board of directors. Because it will not have the heavy overhead of a general hospital, X-rays, surgery, laboratory, etc., nor its large numbers of trained personnel, the cost for accommodation, whether ward or private room, will not by any means be as high as in a hospital equipped to care for the acutely ill. It will be non-racial, non-sectarian and Territory-wide. Patients may, as they do in their own homes, call the doctors of their choice when medical attention is required.

Patients or boarders in the Convalescent-Nursing Home will get the nursing and dietary care their par-

ticular states require. If they develop conditions needing surgery or such professional services as hospitals furnish, their doctors may have them transferred to a hospital for as long as is necessary.

As the home crystallizes, policies for admission and management will be worked out. We mean it to be well managed and adequately supported. It is felt that to get the Home we want we will need to raise at least \$350,000. The idea is to write off the original capital outlay investment, thus making the costs to patients lower than they would be otherwise.

The drive for funds will have started by the time this goes to press. The able chairman is Henry A. White, with Philip E. Spalding, Jr., and Calvin S. White as co-chairmen. There is no deadline for the campaign, though we hope to have ample funds by the end of the year to make a beginning. Doctors have a peculiar opportunity, and may we say an obligation, for helping toward the realization of a Convalescent-Nursing Home for Hawaii; we hope they will talk about it as they go in and out among their patients, that they will let it be known that contributions may be made as cash donations, as memorials, as expressions of gratitude or as bequests in wills, that gifts may be made in money or kind, may be given in cash or in the form of building a unit or furnishing a room. This will not be difficult, for there is one unique factor which differentiates this campaign from any other hitherto, and that is that everyone now has, or will have some day, some kin or friend who is either in need of convalescent care or who, chronically ill or aged, is in need of nursing care.

Checks should be made out to the Convalescent-Nursing Home, and addressed to P.O. Box 3474, Honolulu.

MARGARET M. L. CATTON

# LIBRARY NOTES

## THE HONOLULU COUNTY MEDICAL LIBRARY

MRS. ETHEL HILL, Librarian

MISS DORIS T. YASUTAKE, Library Assistant

8:00 A.M.—4:30 P.M. Phone 65370 7:30 P.M.—9:30 P.M.

### RECENT ACQUISITIONS

#### By Purchase:

- Brock, Samuel: *The basis of clinical neurology*. 2nd ed. c1945.  
 Manson Bahr, Sir Philip: *The dysenteric disorders*. 2nd ed. c1942.  
 Moorhead, J. J.: *Clinical traumatic surgery*. c1945.  
 Rich, A. R.: *The pathogenesis of tuberculosis*. c1944.  
 Rogers, Sir Leonard: *Tropical medicine*. 5th ed. c1944.  
 Stroud, W. D.: *The diagnosis and treatment of cardiovascular disease*. 2v. c1945.

#### From the NURSES' ASSOCIATION

- Anderson, G. W.: *Communicable disease control*. c1941.  
 Beck, A. K.: *Reference handbook for nurses*. c1941.  
 Cooke, W. R.: *Essentials of gynecology*. c1943.  
 Davis, M. E.: *DeLee's obstetrics for nurses*. c1944.  
 Eliason, E. L.: *Practical bandaging*. c1938.  
 Emerson, C. P.: *Essentials of medicine*. c1940.  
 Flikke, J. O.: *Nurses in action*. c1943.  
 Gilbert, Ruth: *The public health nurse and her patient*. c1940.  
 Gladwin, M. E.: *Ethics, a textbook for nurses*. c1937.  
 Greenhill, J. P.: *Office gynecology*. c1943.  
 Grinker, R. R.: *Neurology*. 3rd ed. c1943.  
 Hawley, Gertrude: *The kinesiology of corrective exercise*. c1937.  
 Hess, J. H.: *The premature infant*. c1941.  
 Hume, E. E.: *Victories of army medicine*. c1943.  
 Lyon, R. A.: *Mitchell's pediatrics and pediatric nursing*. c1944.  
 McBride, E. D.: *Crippled children*. c1937.  
 O'Hara, F. J.: *Psychology and the nurse*. c1943.  
 Pennock, M. R.: *Makers of nursing history*. c1940.  
 Rand, Winifred: *Essentials of pediatrics*. c1936.  
 Ribble, M. A.: *The rights of infants*. c1943.  
 Robinson, G. C.: *The patient as a person*. c1939.  
 Robinson, Victor: *The story of medicine*. c1943.  
 Rue, C. B.: *The public health nurse in the community*. c1944.  
 Sewall, Mary: *Trends in nursing history*. c1944.  
 Sellow, Gladys: *The nursing of children*. c1942.  
 Sellow, Gladys: *Sociology and social problems in nursing service*. c1941.

*State board questions and answers for nurses*. 23rd ed. 1945.

Steele, K. M.: *Psychiatric nursing*. c1943.

Taylor, A. M.: *Ward teaching*. c1941.

Williams, B. C.: *Clara Barton, daughter of destiny*. c1941.

Zabriskie, Louise: *Nurses' handbook of obstetrics*. c1943.

#### From the AMERICAN MEDICAL ASSOCIATION

*New and non-official remedies*, 1945.

#### From the UNIVERSITY OF SYDNEY, SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE

*Collected papers*. #1, 1937.

#### By Gift:

Grinker, R. R.: *Men under stress*. c1945.

Maisel, A. Q.: *Miracles of military medicine*. c1945.

### JOURNALS CURRENTLY RECEIVED

The following journals are being *currently* received in the Library. Please add them to the list previously published in the November-December 1944 issue.

Annals of Tropical Medicine and Parasitology  
 Journal of Tropical Medicine and Hygiene  
 Medical Journal of Australia

### JOURNALS NEEDED

With the addition of journals from the Medical Group and The Queen's Hospital internes, a large box of medical journals was packed and turned over to the Red Cross for immediate shipment to the Philippines. The Medical Library is unable to supply all issues of other journals that are also needed. If any doctor has copies of the following journals for disposal, please call Mrs. Hill at the Library:

American Journal of the Medical Sciences. 1942.  
 American Journal of Public Health. 1942-1943.  
 Archives of Internal Medicine. 1942-1943.  
 Surgery Gynecology and Obstetrics. 1942-1944.

While MRS. ETHEL HILL, our medical librarian, was on leave of absence on the west coast, she visited other medical libraries in Los Angeles, San Francisco, and Spokane and made many interesting contacts. She reports that outside of our present lack of space for development of journal files, the Honolulu County Medical Library is the equal of, and is in some ways superior to, any other library of comparable size which she visited.

## BOOK REVIEWS

*Common Ailments of Man.* Edited by Morris Fishbein, M.D. Cloth. Price, \$1.00. Pp. 177. Garden City Publishing Co., 1945.

This book is a collection of sixteen articles dealing with common disease entities or symptom complexes in language understandable by the layman. Each article is by a recognized authority in the field concerned. All have been published previously in *Hygeia*.

Sample titles are "Backache," by Frank Ober; "Anemia," by William Dameshek; "Heart Disease," by Paul White.

The book can be recommended as authoritative, modern, understandable, and a useful reference for the layman of average intelligence. It might also be useful for the doctor who has difficulty finding adequate substitutes for polysyllabic technical words for

explaining patients' diseases to them.

*How to Make a Speech and Enjoy It.* By Helen Partridge. Paper. Price, 75c. Pp. 24. New York: National Publicity Council, 1944.

This is a useful, practical, sympathetic manual of practice for the amateur public speaker. It tells him what to do, step by step, from the time he agrees to make a speech till the time it is over. The approach is a constructive one, with more do's than don't's. The book can be recommended unreservedly for the inexperienced orator.

*My Second Life: an Autobiography.* By Thomas Hall Shastid, M.D. Cloth. Price, \$10.00. Pp. 1174. Ann Arbor: George Wahr, 1945.

A liberally illustrated and rather discursive second book on this subject, by the same author.

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# NOTES AND NEWS

## PERSONALS

DR. JOHN MILNOR, son of DR. AND MRS. GUY C. MILNOR of Alewa Drive, returned in September from Temple University to intern at The Queen's Hospital. DR. ELIZABETH JENNIE SMITH from the University of Iowa became the third woman physician now interning at Queen's. In October three more doctors arrived: DR. JAMES WILLIAM CHERRY of the University of Arkansas, DR. CASIMIR ANTHONY DOMZALSKI and DR. GRANT MINER WEDGE from the University of Michigan.

A surgical residency has been added to the existing residencies in medicine and neuropsychiatry at The Queen's Hospital, and acceptance by the A. M. A. is now under way. DR. JOHN CHALMERS, a St. Louis College graduate before further studies at Northwestern University, will be the first incumbent, beginning October 15.

LT. JAMES WONG, an Olaa resident who attended the University of Hawaii before taking his medical work at Jefferson Medical School, and a veteran of the Okinawa campaign, has been dining in Manila lately, where two servants are employed by his hosts only to keep the flies off the food and the guests.

DR. AND MRS. GARDNER BLACK, DR. AND MRS. SAMUEL WISHIK and DR. AND MRS. H. L. ARNOLD, SR., have recently returned from the mainland. DR. AND MRS. FRED LAM left for a trip to the states August 31. DR. CLIFFORD KOBAYASHI is maintaining Dr. Lam's practice during his absence.

Hawaii's public health nurses are the second best trained group of nurses in the United States and its territories, according to a report of the Federal Security Agency of the U. S. Public Health service. Oregon ranked first, and Alaska third. In January 1945 Hawaii had eighty-seven public health nurses, sixty-five of whom had public health nursing training. Registered nurses may take the public health nursing course at the University of Hawaii for one year and receive a public health nursing certificate.

MISS MARGARET P. EATON joined the Occupational Therapy Staff of The Queen's Hospital in July, replacing Miss JEAN TOMLINSON, who returned to the mainland in mid-September.

MISS BARBARA ANN BROWN, daughter of DR. AND MRS. S. R. BROWN of Hilo, was married to LT. (JG) JAMES DANIEL LANDON, USNR, son of CHIEF AND

MRS. FRANK J. LANDON of Tucson, Arizona, on July 20 in Tucson.

LT. COL. J. E. WALTHER of Kauai was married recently on the mainland.

DR. FORREST J. PINKERTON was married to Mrs. Florence Helmick Macaulay on September 14, 1945. The wedding took place in Central Union Church, Honolulu.

Miss Cherry Young, daughter of Mr. and Mrs. Young Goon, became the bride of DR. THOMAS CHANG on September 1 in Wailuku. DR. CHANG is resident pathologist of The Queen's Hospital.

CAPT. DONALD S. DEPP has reported his new address; Dibble General Hospital, Menlo Park, California.

DR. PAULINE G. STITT, assistant director of the bureaus of maternal and child health and crippled children of the Board of Health, has resigned and left for the mainland, to become regional medical consultant of the Children's Bureau of the department of labor for the southeastern section of the United States. DR. STITT has been with the health department here for two years.

DR. BERNARD WITLIN, acting director of the bacteriological laboratories of the Board of Health, left recently for the mainland under orders to join the Ohio State Health Department.

DR. R. T. EKLUND has moved from Pahala, Hawaii, to Molokai, where he is now practicing. DR. WILLIAM LESLIE has succeeded him as President of the Hawaii County Medical Society. DR. LESLIE KASHIWA is the new physician at Pahala.

MISS PATIENCE L. CLARKE recently returned from the mainland to organize and administer a program of tuberculosis nursing education at Leahi Hospital.

This teaching program will be an affiliation for student nurses of the Honolulu hospitals, public health nurses, and nurses in other fields of nursing, and will be conducted at Leahi Hospital under the immediate direction of DR. H. H. WALKER.

It is expected that there will be an appreciable demand, in the postwar health programs, for nurses who have had special training in tuberculosis nursing. This program, which is being sponsored by the Tuberculosis Association, was suggested at a meeting of a group of nursing educators whose interest was to improve the education and standards of nursing in the territory.



## What's the other thing we ought to do this Christmas?

FOR the last four years, the Christmas phrase "Peace on earth, good will to man" has had a pretty hollow, bitter ring.

This year, it won't.

And surely, one thing each of us will want to do this Christmas is to give thanks that peace has finally come to us—both peace—and victory.

One other thing we ought to do:

In our giving, this year, let's choose—first—the kind of gift that helped to bring us peace and victory and will now help us to enjoy them.

★

Victory Bonds take care of the men who

fought for us—provide money to heal them, to give them a fresh start in the country they saved.

Victory Bonds help to insure a sound, prosperous country for us all to live and work in.

Victory Bonds mean protection in emergencies—and extra cash for things we want to do ten years from now.

★

Choose—first—the finest gift in all the world, this Christmas.

Give Victory Bonds!

## Give the finest gift of all – VICTORY BONDS!

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Claims, words, clever advertising slogans do sell plenty of products. But obviously they do not change the product itself.

That PHILIP MORRIS are less irritating to the nose and throat is not merely a claim. It is the result of a manufacturing difference *proved*\* advantageous over and over again.

But why not make your *own* tests? Why not *try* PHILIP MORRIS on your patients who smoke, and *confirm* the effects for yourself.

\* *Laryngoscope*, Feb. 1935, Vol. XLV, No. 2, 149-154  
*Laryngoscope*, Jan. 1937, Vol. XLVII, No. 1, 58-60

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PHILIP MORRIS & Co., LTD., INC.  
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### TO PHYSICIANS WHO SMOKE A PIPE:

We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

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## *Not Merely* **ISOLATED NUTRIENTS**

Essential though they are, vitamins are nevertheless not the only nutrients which may be lacking in the diet of persons physically below par. Nutritional imbalance, not infrequently the cause of poor physical stamina, excessive irritability, and poor appetite, may be attributable to other dietary-induced deficiencies. In consequence, adjustment of the entire nutritional intake is indicated.

Virtually any diet can be enhanced to a point of adequacy through the addition of three glassfuls of Ovaltine daily. Made with milk as

directed, this delicious food drink supplies liberal quantities of most essential nutrients, as indicated by the table below. Qualitatively Ovaltine is equally valuable; it provides biologically adequate protein, readily assimilated and utilized carbohydrate, well emulsified fat, B complex and other vitamins, as well as essential minerals. Ovaltine proves advantageous both as a mealtime beverage and a between-meal snack. Its low curd tension insures rapid gastric emptying, hence it does not interfere with the appetite for the next meal.

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# *Ovaltine*

Three daily servings of Ovaltine, each made of  
½ oz. Ovaltine and 8 oz. of whole milk,\* provide:

PROTEIN . . . . .	31.2 Gm.	VITAMIN A . . . . .	2953 I.U.
CARBOHYDRATE . . . . .	62.43 Gm.	VITAMIN D . . . . .	480 I.U.
FAT . . . . .	29.34 Gm.	THIAMINE . . . . .	1.296 mg.
CALCIUM . . . . .	1.104 Gm.	RIBOFLAVIN . . . . .	1.278 mg.
PHOSPHORUS . . . . .	.903 Gm.	NIACIN . . . . .	7.0 mg.
IRON . . . . .	11.94 mg.	COPPER . . . . .	.5 mg.

\*Based on average reported values for milk.



## PENICILLIN SCHENLEY

*— the drug that gives new meaning to the word "control" —*

The penicillin which first attracted the attention of Alexander Fleming was an "occurrence of nature", with no control exercised over the conditions of its production. Production of pyrogen-free penicillin for the medical profession, however, is accomplished only by the most elaborate methods of control for insuring highest attainable productivity, potency, and purity.

Shown here is one of the many rigid controls exercised at the Schenley Laboratories. In this step, PENICILLIN Schenley is being tested to insure standard potency. As supplies of penicillin increase, the elaborate system of control will continue to safeguard its production at Schenley Laboratories.



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*In the City of Bagdad* lived Hakeem, the Wise One,  
and many people went to him for counsel, which he gave freely to all, asking nothing in return

There came to him a young man, who had spent much but got little, and said: "Tell  
me, Wise One, what shall I do to receive the most for that which I spend?"

Hakeem answered: "A thing that is bought or sold has no value unless it contains that which  
cannot be bought or sold. Look for the Priceless Ingredient."

"But what is this Priceless Ingredient?" asked the young man.

Spoke then the Wise One: "My son, the Priceless Ingredient of every product in the market-  
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**IT'S EARNED A HALO, NOW—**

*... with A. C. D. Solution,  
you'll call the Cutter  
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For economy of operation, and peak plasma production, Cutter Sediflasks were a smart buy—even *before* A.C.D. Solution.

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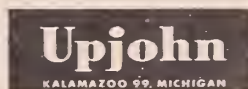
# Jack Spratt could eat no fat...



Finicky, fanciful, and foolish, the American palate selects its food neither too wisely nor too well—and therein lies the greatest reason for widespread vitamin deficiencies. When vitamin supplementation is indicated, it can readily be achieved with a potent, balanced, yet easy-to-take, low cost Upjohn vitamin preparation.

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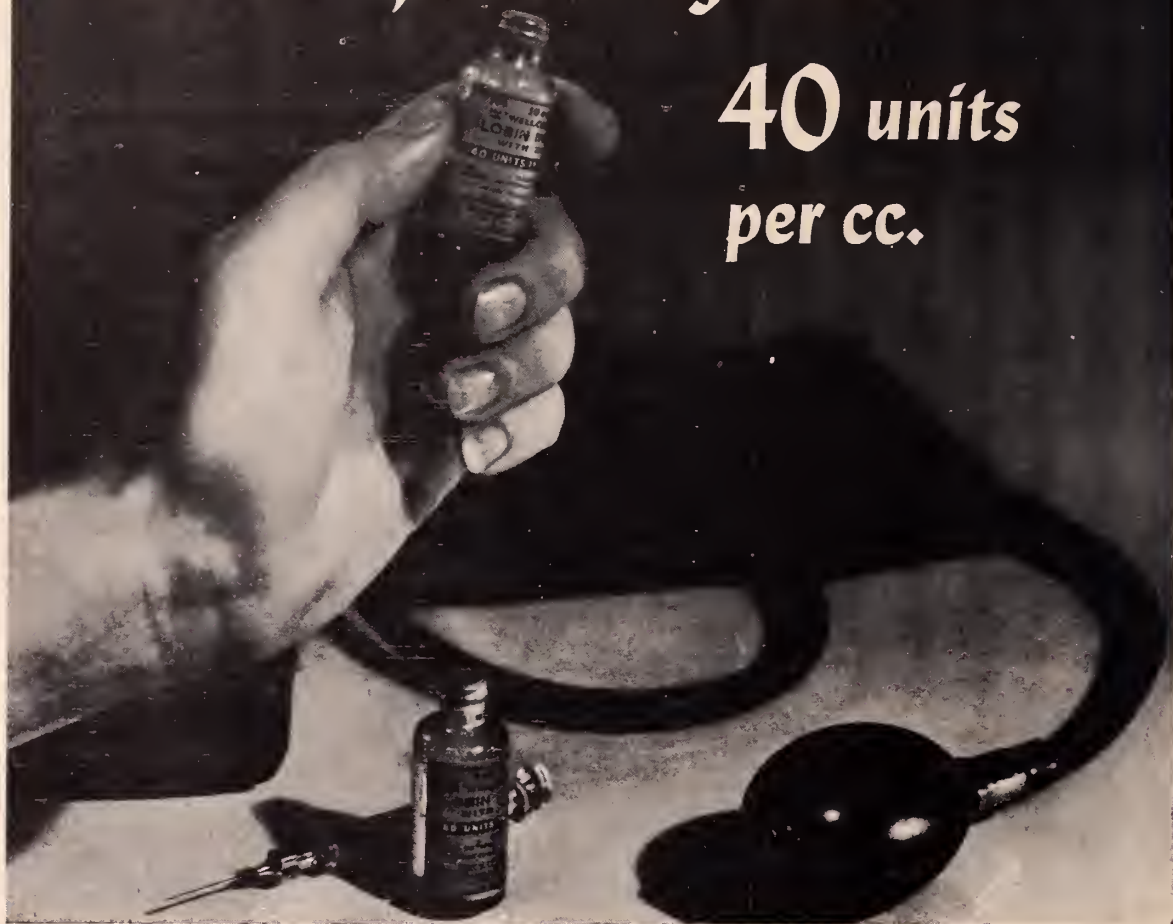
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The new 40 unit strength will be readily distinguishable by a distinctive *red* and tan label. As before, the 80 unit per cc. ampule is easily recognized by its *green* and tan label. Both strengths are available in vials of 10 cc. Developed in the Wellcome Research Laboratories, Tuckahoe, New York. U.S. Patent No. 2,161,198. Literature on request. 'Wellcome' Trademark Registered.

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WITH ZINC



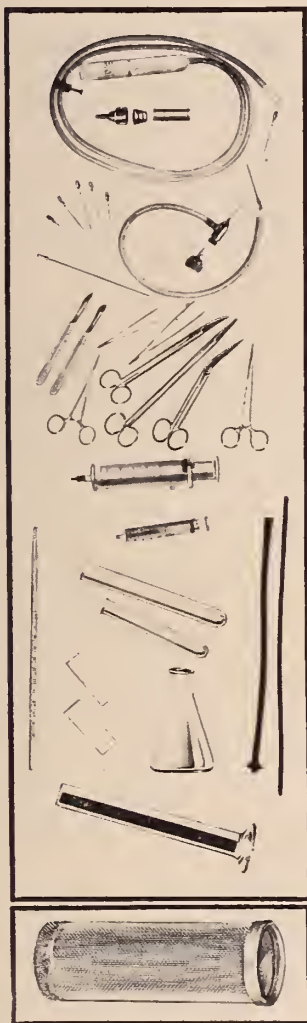
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**BLOOD AND PLASMA EQUIPMENT, SURGICAL INSTRUMENTS AND EQUIPMENT,  
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**PRICES** — DETERGEX powder is supplied in 2-pound package (makes 32 gallons of cleaner) at following prices: Single package — \$2.50; in lots of 6 — \$2.25 each;

## HOW DETERGEX IS USED

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DETERGEX — 2-Pound Package — Catalog No. CL-20

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Physicians have been prescribing Marcelle-hypo-allergenic Cosmetics for years as a routine measure in allergic and suspected allergic cases. The importance of the cosmetic factor is evidenced by the success which physicians have experienced through the recommendation of Marcelle hypo-allergenic Cosmetics.

Marcelle hypo-allergenic Cosmetics have been acceptable for advertising in publications of the American Medical Association for 13 years.



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- We will work with the Territorial and Honolulu County Medical Societies for the development of an adequate Medical and Hospital Plan, locally controlled.

*Serving and Conserving the Community Health*



# Now

## a stable solution of vitamin C for oral administration

Ascorbic Acid is easily decomposed by oxidation, as well as by the presence of certain other substances; therefore, the wide use of vitamin C in clinical practice has been chiefly in the form of tablets, which are stable. The tablets, however, had to be crushed in order to dissolve in milk or water, with the possibility of some loss, when used to supplement the diet of infants and small children. On the other hand, a simple aqueous solution, while more convenient, deteriorates rapidly. ● In Cecon, Abbott Laboratories offers a stable concentrated (10 percent) solution of free ascorbic acid in propylene glycol suitable for oral administration in drop doses. Cecon is immediately and completely soluble in water, milk, or liquid foods. It does not curdle either hot or cold milk. It may be added to the infant's formula or to the individual bottle at feeding time. Cecon mixes readily with cereals or other soft foods and has no unpleasant taste. ● For infants who are unable to accept orange juice—or for children and adults to whom the administration of tablets presents difficulty, Cecon is a convenient means of supplementing the diet with vitamin C. It requires no refrigeration. Cecon is supplied in 10-cc. and 50-cc. bottles, with dropper, through prescription pharmacies everywhere. ABBOTT LABORATORIES, North Chicago, Illinois.

# Cecon

TRADE MARK

(Solution of Ascorbic Acid 10% W/V in Propylene Glycol, Abbott)

# HE LEARNS TO EAT BY WATCHING OTHERS



THE NEW TECHNIC of eating which presents itself around the time of weaning poses a real problem for even the most patient of mothers.

As a means of overcoming some of the difficulty, it is suggested that the weaning infant should eat with the family and so learn by watching his elders.

A further aid to smoothing over the period of feeding transition is provided in the use of HORLICK'S. Mixed with milk, the delicious malty flavor finds eager acceptance. Full food values of basic, body-building nutrients are also available in a liquid food that imposes minimum strain on digestion.

RECOMMEND

# HORLICK'S

*POWDER or TABLETS*

THE COMPLETE MALTED MILK — NOT JUST A FLAVORING FOR MILK  
OBTAINABLE AT ALL DRUG STORES





# CONSTANT ALERT!

Calm, steady nerves and all-around good health are essential during times such as we are living through today. Regular daily intake of the Vitamin B Complex as a dietary supplement will help maintain the full integrity of nerve tissues. • GALEN "B"\* is an entirely natural concentrate derived from rice bran. It supplies the entire Vitamin B Complex in essentially the same proportions in which it is removed from our diet as the result of the milling of cereals. Galen "B" is thus ideally balanced as a supplement to the average diet. Designed for regular every day use, not only as a medicine, but as an essential food adjunct.

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BERKELEY, CALIFORNIA



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# ERYTHROL TETRANITRATE MERCK in Angina Pectoris

It is generally agreed that the acute attack of anginal pain is most readily relieved by the prompt removal of the provocative factor, and by the use of nitrites. For this purpose, the rapidly acting nitrous and nitric acid esters, amyl nitrite and nitroglycerin, are considered most useful.

For prophylactic purposes—to control anticipated paroxysms—the *delayed but prolonged action* of erythrol tetranitrate is more effective. Erythrol tetranitrate, because of its slower and more prolonged action, is also considered preferable for the purpose of preventing nocturnal attacks.

The vasodilatation produced by Erythrol Tetranitrate Merck begins 15 to 20 minutes after administration, and lasts from 3 to 4 hours.

***The properly timed administration of a vasodilator having a sustained effect may prevent the following episodes of angina pectoris:***

- The man who finds it necessary to stop and rest when he walks to the train in the morning.
- The man who suffers "indigestion" and "gas" on exertion, or after a heavy meal.
- The man who has pain in his chest and arms, and weakness upon any anxiety, anger, or nervous strain.



MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.





# EFFECTIVE ESTROGENIC MANAGEMENT

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(2, 4-di (p-hydroxyphenyl)-3-ethyl hexane)

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Providing relief from the more distressing symptoms of the menopause, with a minimum of inconvenience and expense to both the physician and the patient, this synthetic estrogen is an important part of the scheme of management of the climacteric patient.

To this convenience and economy may be added the fact that Schieffelin BENZESTROL is well tolerated, making it a notable contribution to the treatment of all conditions for which estrogen therapy is indicated.

Schieffelin BENZESTROL is available for oral, parenteral and local administration.

**Schieffelin BENZESTROL Tablets**  
0.5, 1.0, 2.0 and 5.0 mg. 50s—100s—1000s

**Schieffelin BENZESTROL Solution**  
5.0 mg. per cc 10 cc vials

**Schieffelin BENZESTROL Vaginal Tablets**  
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*Literature and Sample on Request*

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## Formula for a happy baby

FORMULA: To one basically healthy baby, add palatable, uncomplicated 'Dexin' feedings. Serve with affection. Let baby rest undisturbed overnight.

'Dexin' brand High Dextrin Carbohydrate offers assurance that the daily formula will be taken and retained. Its high dextrin content (1) diminishes intestinal fermentation and the tendency to colic and diarrhea, and (2) promotes the formation of soft, flocculent, easily digested curds.

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# 'Dexin'

HIGH DEXTRIN CARBOHYDRATE

Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available carbohydrate 99% • 115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods, American Medical Association.

'Dexin' Reg. Trademark



Literature on request

BURROUGHS WELLCOME & CO. (U.S.A.) INC. 9 & 11 E. 41st St., New York 17, N. Y.



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# BRIEF HISTORICAL NOTES ON MEAD'S CEREAL, PABLUM AND PABENA

---

HAND in hand with pediatric progress, the introduction of Mead's Cereal in 1930 marked a new concept in the function of cereals in the child's dietary. For 150 years before that, since the days of "pap" and "panada," there had been no noteworthy improvement in the nutritive quality of cereals for infant feeding. Cereals were fed principally for their carbohydrate content.

The formula of Mead's Cereal was designed to supplement the baby's diet in minerals and vitamins, especially iron and thiamine. How well it has succeeded in these functions may be seen from two examples:

(1) As little as one-sixth ounce of Mead's Cereal\* supplies over 50% of the iron and 20% of the thiamine minimum requirements of the 3-months-old infant. (2) One-half ounce of Mead's Cereal furnishes all of the iron and 60% of the thiamine minimum requirements of the 6-months-old baby.

That the medical profession has recognized the importance of this contribution is indicated by the fact that cereal is now routinely included in the infant's diet as early as the third or fourth month instead of at the sixth to

twelfth month as was the custom only a decade or two ago.

In 1933 Mead Johnson & Company went a step further, improving the Mead's Cereal mixture by a special process of cooking, which rendered it easily tolerated by the infant and at the same time did away with the need for prolonged cereal cooking in the home. The result is Pablum, an original product which offers all of the nutritional qualities of Mead's Cereal, plus the convenience of thorough scientific cooking.

During the last twelve years, these products have been used in a great deal of clinical investigation of various aspects of nutrition, which have been reported in the scientific literature.

Many physicians recognize the pioneer efforts on the part of Mead Johnson & Company by specifying Mead's Cereal and PABLUM—and also the new Pablum-like oatmeal cereal known as PABENA.

---

\*Pablum, the precooked form of Mead's Cereal, has practically the same composition: wheatmeal (farina), oatmeal, cornmeal, wheat embryo, beef bone, brewers yeast, alfalfa leaf, sodium chloride, and reduced iron.

# HAWAII MEDICAL JOURNAL

ME 5

JANUARY-FEBRUARY, 1946

NUMBER 3

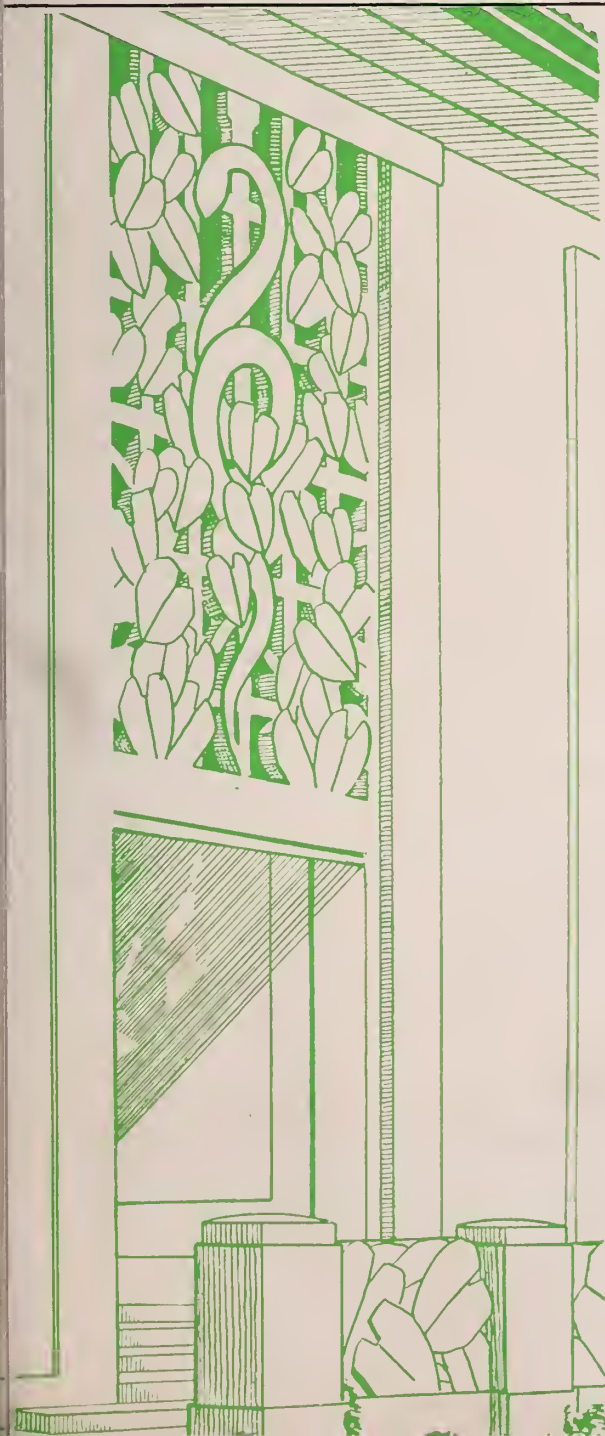
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NORMAN R. SLOAN, M.D.

INTER-ISLAND NURSES' BULLETIN

ANNUAL MEETING, TERRITORIAL ASSOCIATION  
May 3-4-5, 1946

POSTGRADUATE LECTURES, CHAUNCEY D. LEAKE  
May 6-17, 1946





## **BY INJECTION**

subcutaneously or intramuscularly, ADRENALIN provides rapid symptomatic relief in asthmatic paroxysms; is useful in the prevention and treatment of other allergic reactions; localizes and prolongs the action of local anesthetics. Intravenously, it is used in shock and anesthesia accidents.



## **BY APPLICATION**

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## **BY INSTILLATION**

into the nasal passage, ADRENALIN produces prompt decongestion; in the eye ADRENALIN decreases vascular congestion, and aids in the location of foreign bodies.

## **BY INHALATION**

orally, ADRENALIN relieves severe attacks of bronchial asthma by relaxing the bronchial muscles.



Its remarkable ability to stimulate the heart and increase cardiac output, raise the blood pressure, constrict the peripheral arterioles, dilate blood vessels of voluntary muscles, and relax bronchial muscles . . . makes ADRENALIN one of the most *versatile* and *useful* therapeutic agents at the command of the physician. Little wonder, then, that it's always kept close at hand in operating room, office, and medical bag.

To permit full use of its many therapeutic applications, there is a form of ADRENALIN (Epinephrine) to meet every medical need: Solutions of 1:100, 1:1000, 1:2600, 1:10,000; Suspension of 1:500 in oil; and Inhalant, Suppository, and Ointment.



**PARKE, DAVIS & COMPANY**

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AMPULS FOR *Injection***

There has long been a real need for a potent, mercurial diuretic compound which would be effective by mouth. Such a preparation serves not only as an adjunct to parenteral therapy but is very useful when injections can not be given.

After the oral administration of Salyrgan-Theophylline tablets a satisfactory diuretic response is obtained in a high percentage of cases. However, the results after intravenous or intramuscular injection of Salyrgan-Theophylline solution are more consistent.

Salyrgan-Theophylline is supplied in two forms:

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Each tablet contains 0.08 Gm. Salyrgan and 0.04 Gm. theophylline.

**SOLUTION** in ampuls of 1 cc., boxes of 5, 25 and 100;  
ampuls of 2 cc., boxes of 10, 25 and 100.

Write for literature



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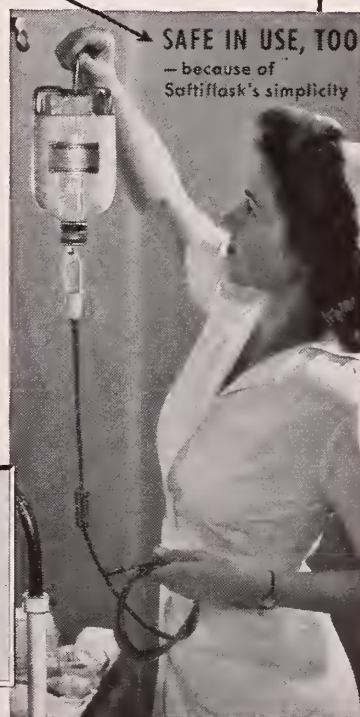
**1** Produced in one of America's oldest biological laboratories, Cutter Saftiflask solutions are controlled as exactly as the most delicate vaccines and antitoxins. Expert chemists, bacteriologists, and physiologists test Saftiflask solutions by every known scientific means.

**2** To use Cutter Saftiflasks requires no involved gadgets to assemble — no chance of a break in sterility technic. Just plug in your injection tubing to administer safely this safer solution.

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# TRACHEOTOMY IN LEPROSY

NORMAN R. SLOAN, M.D.\*  
KALAUPAPA, MOLOKAI

LEPROUS infiltration of the larynx, necessitating tracheotomy as a life-prolonging procedure, is common in the lepromatous form of the disease; so common that at Kalaupapa Settlement 13.1 per cent of active patients are wearing tracheal tubes.† As textbooks devote little or no attention to this subject, this article is presented in the hope that our experience will be of value to others.

## CASE MATERIAL

One hundred and forty-six operations have been performed on 144 patients in a twelve-year period. Of these, 43 were done by me during the last four years, including all but one since July, 1941. On this material, graphically summarized in Figure 1, this study is based.

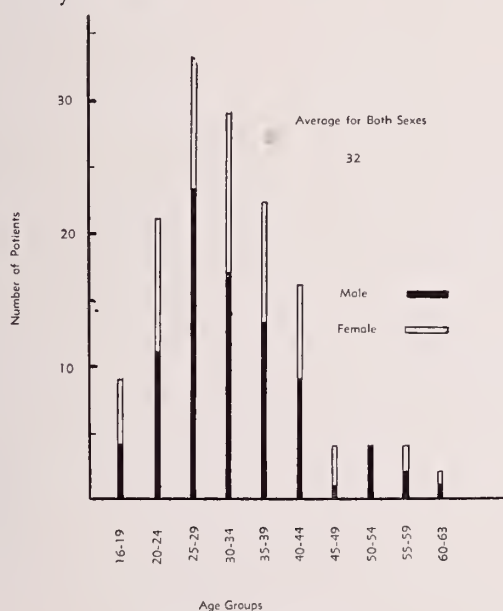


Fig. 1. Case Material

Totals are given in Table 1. Proportion of sexes is as expected: the usual ratio at Kalaupapa is about three males to two females. The interval between first commitment and operation is shown in Figure 2. The average is 12 years, three years longer than the average life of all lepromatous cases. This does not mean that presence of a laryn-

geal lesion prolongs life; it rather seems to indicate that most lepromatous patients do not live long enough to develop laryngeal stenosis. This is borne out by finding that of 32 lepromatous patients now living, whose first admission was prior to July 1, 1929 (15 years ago), 16, or 50 per cent, are now wearing tracheal tubes; and of the remainder seven show evidence of laryngeal leprosy which may require operation later.

TABLE 1. Cases Studied

	MALE	FEMALE	TOTAL
Living .....	27	19	46
Dead .....	58	40	98
Total .....	85	59	144

Age at operation, in five-year periods, is shown in Figure 3. This is about what would be expected in view of the foregoing and the well-known tendency of first signs of leprosy to appear in adolescence or early adult life.

Three patients discontinued use of their tubes. One who used his only a month lived four years and died of nephritis; probably the operation was not necessary. The second required re-operation after eight months; it is not known at what time the tube was removed. The third wore his tube about two years; a second operation was needed two years after removal.

## PATHOGENESIS

Leprotic laryngitis is found only in lepromatous patients, usually in those who first present lesions of the mouth or pharynx. The epiglottis is first involved, and may become several times normal size; spread to the vocal cords produces gradual narrowing of the glottis, which may become so small that slight swelling of the mucosa can obliterate it and cause death. The narrowing of the glottis causes increased respiratory effort, and perhaps at times mild bronchiectasis. Bronchial secretions are expelled with difficulty, and their accumulation increases the dyspnea, producing a vicious cycle which can be broken only by providing an adequate airway.

## SYMPTOMATOLOGY

Hoarseness is the first symptom, which may be present for months or years before operation is required. It is, however, a danger signal, and persistently hoarse patients should be carefully studied.

\* Medical Director, Kalaupapa Settlement.

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Reprinted, abridged, from *The International Journal of Leprosy*. The complete article, including details of operative technique, appears in the author's reprints.—ED.

† All figures are as of June 30, 1944.



*Dyspnea* is both a symptom and a sign. At first the patient notices "tightness," particularly when suffering from a cold; there may be periods of remission, but the trend is toward increasing severity. As the condition becomes worse wheezing respiration appears, often audible at a distance. If operation is deferred, actual "choking spells" occur, particularly in periods of cold or damp weather, when laryngeal edema may occur. It is well not to wait for these, as occasionally the first is fatal.

pletely changed; usually all one sees is swollen tissue surrounding a small and narrow opening, if any opening at all is visible. At times small discrete nodules are seen on the vocal cords in relatively early cases.

#### INDICATIONS AND CONTRA-INDICATIONS

The indication for tracheotomy is gradually increasing hoarseness and dyspnea. Most patients will not consent to surgery until after one or more acute episodes, known locally as "choking spells."

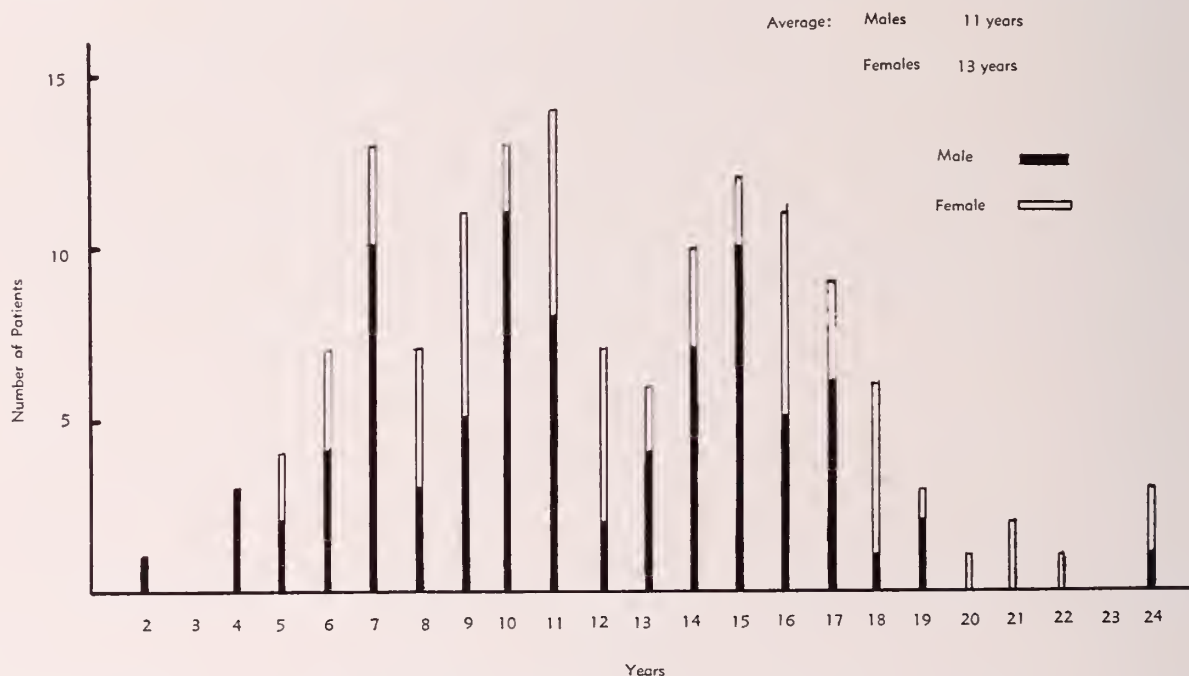


Fig. 2. Time from First Commitment to Operation

#### PHYSICAL SIGNS

*Dyspnea*: see above. When acute, respiratory movements are rapid and forced, and the condition somewhat resembles bronchial asthma.

*Retraction* of supra-sternal and infra-sternal regions occurs on forced inspiration.

*Rales* are heard throughout the chest, especially in the lower lobes. They are caused principally by accumulated mucus, and vary in character depending on location and amount of mucus present.

X-ray of chest shows increase in broncho-vascular markings, also most marked in the lower lobes. This adds little to clinical information, but may be of value in persuading the patient that operation is needed.

*Indirect laryngoscopy* shows a large and frequently nodular epiglottis, which may prevent visualization of the glottis. If the larynx is clearly seen, the appearance of the vocal cords is com-

However, operation is advised as soon as signs and symptoms are definite; in our experience patients who wait as long as they dare have more stormy convalescence than those who receive early attention, and their post-operative life expectancy is less. Moreover, it is advisable to operate while the voice is in fair condition; a lost voice probably will not be regained.

No absolute contra-indication is recognized, if dyspnea is sufficiently severe. It is better to defer operation if possible in cases of skin infection and acute febrile conditions. Tuberculosis and pregnancy are not contra-indications; but delivery is more difficult in a patient wearing a tracheal tube, because she is unable to bear down well. Elective cesarean section and sterilization may be considered.

#### RESULT OF OPERATION

The immediate relief obtained from the operation is striking, even in many cases in which ob-

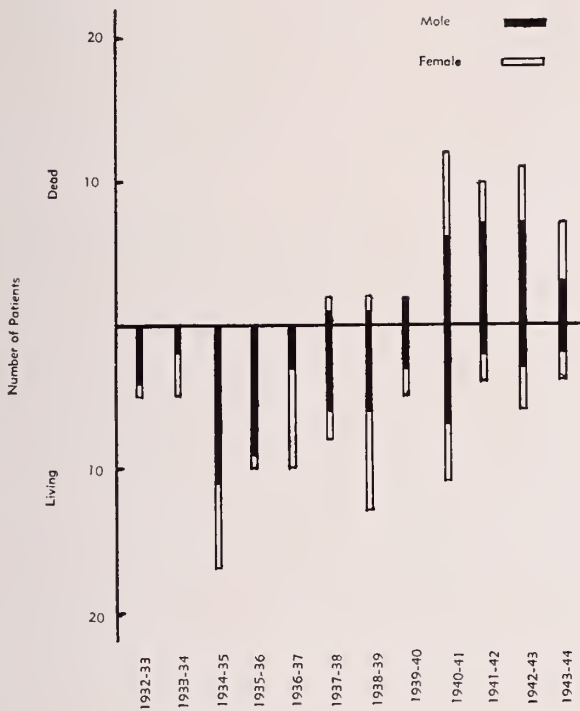


Fig. 3. Age at Operation

struction is far from complete. The usual reaction of the patient is "I wish I had had it done months ago." Rare indeed is the patient who, after operation, thinks he should have waited longer.

If the operation has not been too long delayed, and the patient is in reasonably good condition, relatively normal pulmonary function is soon re-established, and may last for years. In time, however, chronic bronchitis develops, with excessive mucus, edema, and crusting. The crusts become detached and form partial obstructions, with coughing and choking and further edema; spells of this become gradually worse, and eventually cause death. Thus, following tracheotomy, patients either die of intercurrent disease (in an average of one year and seven months) or of "chronic bronchitis due to indwelling tracheal tube" (in an average of three years and one month). The causes of death are shown in Table 2.

TABLE 2. Causes of Death

	POST-OPERATIVE	OTHER	TOTAL
"Tube deaths" .....	26	26	26
Leprosy .....	2	24	26
Tuberculosis, pulmonary .....	13	13	13
Cardiac (and cardio-renal) disease .....	3	6	9
Pneumonia .....	2	5	7
Nephritis .....	1	2	3
Laryngeal stenosis (operation too late) ..	2	2	2
Tuberculosis, lymph node .....	2	2	2
"Septicemia" .....	1	1	1
Cellulitis .....	1	1	1
Gastro-enteritis .....	1	1	1
Hepatic cirrhosis .....	1	1	1
Not known or doubtful .....	3	3	6
Total .....	14	84	98

The laryngeal rest afforded by the operation usually results in preserving what vocal ability remains, and sometimes there is considerable improvement. Aphonia has developed in only 2 of our 46 living tracheotomy cases.

The 46 living patients were classified as to the degree of difficulty resulting from use of the tube, from "0" (fully satisfactory function) to "4" (severe distress, perhaps moribund). These are summarized in Table 3.

TABLE 3. Status of Living Patients  
(See text for explanation)

GROUP	MALE	FEMALE	TOTAL
0 .....	11	9	20
1 .....	9	5	14
2 .....	4	3	7
3 .....	2	1	3
4 .....	1	1	2
Total .....	27	19	46

There is no correlation between a patient's condition and the time the tube has been worn. Difficulty may start a few months after operation, or there may be none for several years. An "0" patient has worn his tube more than six years; a "4" patient, less than two years.

Three patients have pulmonary tuberculosis; 2 have lymph node tuberculosis; and 4 are blind.

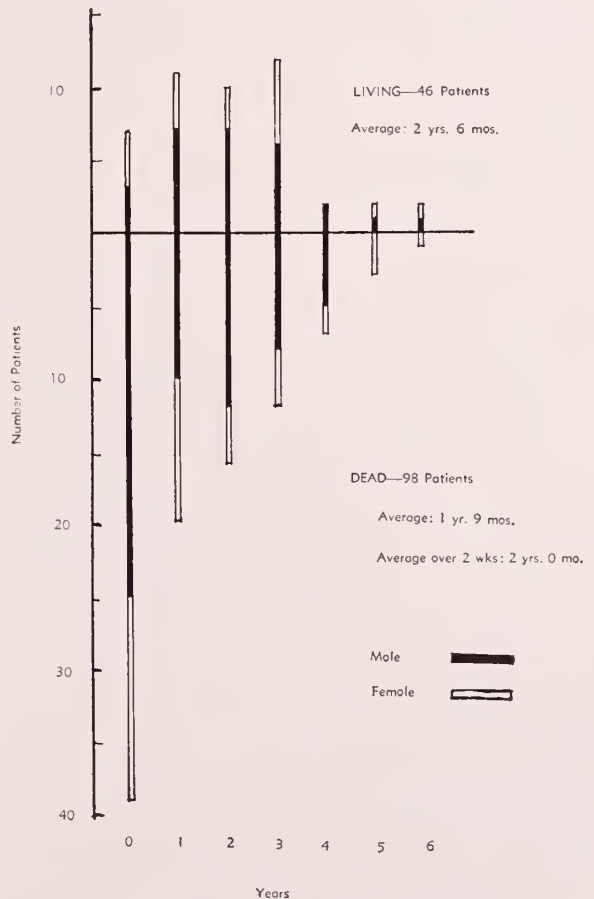


Fig. 4. Years After Operation

## A LOOK AHEAD

Our figures clearly indicate that the patients are living longer; it is particularly interesting to note that the average length of life to date of living patients is greater than that of those who have died. This is graphically summarized in Figure 4. It should be interesting to compare figures five or ten years from now to see whether this trend continues.

All of us hope that the near future will provide a chemotherapeutic agent effective in leprosy, of sufficiently low toxicity for mass use. Until that happy day we must treat our patients symptomatically; and, as treatment of non-leprosy conditions improves (as by use of sulfonamides and penicillin), we may expect patients to live longer—and the proportion of "tube cases" will increase.

## CONCLUSIONS

Experience at Kalaupapa Settlement with patients requiring tracheotomy has led to the following conclusions:

1. Most lepromatous patients who live long enough develop laryngeal stenosis and require tracheotomy.

2. It is not good practice to wait until an emergency arises. When indications are definite the operation should be performed, with careful attention to detail, especially control of bleeding.

3. Avoidance of meddlesome interference is the most important item in post-operative care.

4. "Chronic bronchitis" will eventually develop in tube-wearing patients, in time causing the death of those who have not succumbed to intercurrent disease. This may be a few months after operation, or it may be more than seven years.



# PELLAGRA

## A REPORT OF TWO CASES

H. M. PATTERSON, M.D.  
OLAA, HAWAII

**P**ELLAGRA is a food deficiency disease. Most of the evidence points to its being due to a deficiency of the vitamin fraction of foods, and it is generally considered to be due to a deficiency of vitamin B complex. Many observers feel that a deficiency of two or more vitamin fractions or related substances is present in pellagra. Certainly it is probable that a pellagra-producing diet is deficient in many vitamins and probably the patient with pellagra has multiple—though sometimes subclinical—vitamin deficiencies. It is generally agreed that the primary deficiency in pellagra, and the one which produces its characteristic signs and symptoms, is a deficiency of niacin (nicotinic acid) or of a related substance with a similar action. The common and cardinal signs and symptoms of pellagra disappear when an adequate intake of niacin is given.

Niacin is found principally in lean meats, milk, liver and yeast. It is easily produced in the laboratory and is very stable. It is quickly absorbed from the gastro-intestinal tract and hence tablets by mouth are very effective. When the oral route is either impossible or undesirable it may be given parenterally. In large doses or susceptible individuals, it may cause transitory flushing, itching and tingling of the face and extremities. The amide seems as effective as the acid and does not produce this undesirable vasodilatation.

The principal symptoms of pellagra are soreness of the tongue, oral mucous membranes and gums, dryness and cracking of the lips, irritation and discoloration of the skin principally on the back of the hands, loss of appetite, diarrhea, and varying degrees of nervous and mental irritability and instability.

The principal signs of pellagra are dermatitis, stomatitis, glossitis and at times diminished reflexes. The dermatitis is principally of the back of the hands but may spread to all exposed surfaces, and the scrotum.

In the United States pellagra has been considered as an endemic disease in the extreme southeastern states, occurring in people receiving an inadequate diet. Sporadic cases have been reported from other localities in chronic alcoholics and in

patients chronically ill with diseases which prevented intake of food or the proper absorption of food taken. The patients concerned with this report fall into the two latter categories.

## REPORT OF CASES

**CASE 1:** A Japanese man, 60 years of age, was first seen on May 8, 1941, complaining of irritation and discoloration of the backs of the hands, no appetite, and soreness of the gums, tongue and mouth. He gave the story of having gone into the cane fields six days previously and talked for several hours with the field workers. Since he was not accustomed to this degree of exposure to the sun, it was decided after a cursory examination that he was suffering from sunburn. On May 10, 1941, Dr. M. A. Blankenhorn saw him and the diagnosis of pellagra was made.

The patient was kept in the hospital from May 10 to June 6, 1941. He had yellowish, liquid stools containing no blood or mucus for three weeks. The backs of his hands were reddish brown and later desquamated. His lips, gums, tongue and mouth were very sore and red and his appetite was poor.

He had had exactly the same symptoms in September, 1940. At that time he rested at home, consulting no physician, and at the end of five weeks had returned to normal. He remained well until January 21, 1941, when he developed diarrhea, having about six yellowish watery stools every 24 hours. Again there was no blood or mucus and the diarrhea ceased spontaneously after 10 days but at this time he noticed his appetite was very poor, his mouth, tongue and gums were very sore and the backs of his hands were discolored, as well as, to a lesser degree, his forehead and cheeks. These signs and symptoms disappeared after rest in bed for four weeks.

He was apparently well until May 2, 1941, when he was exposed to sun for four hours, this being very unusual for him. The following day the backs of his hands were very red and sore. His lips were dry and cracked, his mouth, tongue and gums were sore and he did not feel like eating. During the following six days all these symptoms grew worse and he came to the dispensary for help. He had no diarrhea during this period. His gums had been so sore that he could chew no food. His principal diet for a week had been rice soup and *sake*, a Japanese alcoholic beverage of 17 per cent alcoholic content.

The patient came to Hawaii from Japan 35 years before admission. He was an independent cane planter but had not worked since 1935. For 39 years he has been a heavy drinker of Japanese *sake*. He has averaged six gallons of this beverage per month for 30 years, and about eight gallons per month for the past two years. His average daily diet for three years has been a cup of white rice or of cream of wheat with two cups of *sake* for breakfast; midmorning, *sake* freely; lunch, two cups

Read before the fifty-fifth annual meeting of the Hawaii Territorial Medical Association, May 5, 1945.

of *sake*; midafternoon, *sake* freely; and supper, a few slices of raw fish and three cups of *sake*.

Physical examination showed a 60 year old Japanese male, 66 inches tall, weighing 80 pounds, very irritable and nervous, unable to keep still and most difficult to examine because his attention could be held but momentarily. There was slight brownish discoloration of his forehead and cheeks over the bony prominences. His lips were dry and cracked at the corners of the mouth. His tongue was thick, swollen, red and tender and his gums were red, spongy and tender (Fig. 1). The mucous membranes of the mouth were red, swollen and



FIG. 1 (Case 1). Swelling and redness of tongue and dryness and cracking of lips, especially near corners of mouth. Photograph taken upon admission, before treatment.

tender. Several upper teeth were missing but there were sufficient teeth to chew food. The skin of the entire body was dry, wrinkled and rough. There was no discoloration of the neck, the forearms, arms, feet or legs. There was a reddish discoloration of the backs of the fingers, hands and wrists, which stopped at the edges



FIG. 2 (Case 1). Hands and wrist upon admission, before treatment. Normal colored skin of forearms with sharply demarcated reddish-brown discoloration (dark in photograph) of extensor surfaces of wrists, hands and fingers. Area of desquamation over second left metacarpal.

of the extensor surfaces. The edges of these areas of discoloration were brighter red and suggested inflammation more than the centers, which were very dark. Over the left second metacarpal there was an area of desquamation about 3 cm. in diameter, the base of which was cracked, moist and oozing serum (Fig. 2). The nails were fissured and cracked at the tips. All of the deep reflexes were greatly diminished. The patient walked rather unsteadily. Heart, lungs, abdomen and other tissues were normal except for malnutrition. Pupils reacted normally to light and in accommodation.

Hemogram and urinalysis were normal; P.P.D. test was positive; x-ray of lungs was normal; Wassermann was 4 plus, Kahn 2 plus.

The patient was placed on a vitamin deficient diet with no alcohol for five days during which time he was seen by most of the physicians in this area. He was already improving clinically on this deficiency diet when he was placed on a well balanced diet with polyvitamin therapy and more rapid improvement was noted. Twelve days after admission he was placed on 50 mg. niacin by mouth three times daily; within five days his mouth, gums, and lips were normal and he was able to eat anything. The skin of the back of both hands desquamated completely and upon discharge from the hospital on June 5, 1941, 25 days after admission, the color of the backs of the hands was normal (Fig. 3). Reflexes were more active upon discharge. He weighed 86 pounds upon discharge, a gain of six pounds, and his nervousness and mental instability were largely gone. He had no excessive salivation in the hospital, a sign in which Dr. Blankenhorn was specially interested.



FIG. 3 (Case 1). Three weeks after admission and nine days after receiving niacin. Compare area of desquamation over second left metacarpal with same area in Figure 2.

At home the patient was placed on an adequate diet with polyvitamin therapy and was allowed two ounces of *sake* with each meal. He continued to tolerate food and had no signs or symptoms suggestive of pellagra up to June 13, 1942, when he was returned to the hospital, unable to walk, in an extreme state of malnutrition, with soreness, swelling and redness of the tongue and membranes of mouth, loss of appetite and with



slight redness and discoloration of the backs of hands. He was mentally confused upon admission, and his deep reflexes were all absent. He was disoriented as to time and place and had a flight of ideas when aroused but in general he was depressed. His mental confusion continued until he died. His wife stated that he had been fine until one month previously when he developed diarrhea and loss of appetite. He then began to take large amounts of any kind of alcohol he could obtain, the Japanese *sake* being no longer available. The patient was given supportive treatment including large doses of nicotinic acid but signs and symptoms of heart failure which were present upon admission progressed and he died one week after admission.

CASE 2. A Caucasian man, age 84, was admitted to the Olaa Hospital on January 4, 1945, complaining of persistent, irritating, nonproductive cough for six months. During this time he had had increasing anorexia until upon admission he was eating hardly anything. His mouth felt dry and sore and his tongue felt swollen. He had had no diarrhea but on many occasions during the past six months he had vomited and food had not tasted like it did in previous years. He had lost 20 pounds in six months. He had noticed dark, reddish-brown discoloration of the backs of his hands for six months or longer, but this had become more noticeable in the past month. He had noticed increased salivation for the past six months. He had had edema of the ankles for one month. He had never had similar symptoms before. He had always been active and had been generally well all of his life. He had had no mental symptoms. He had taken about one ounce of whisky per day and for 20 years had used alcohol very moderately.

Examination showed an 84 year old Caucasian male who had recently lost considerable weight. His skin was dry and wrinkled. Blood pressure was 120/76, pulse 84, temperature 98.6° F., weight 166 pounds, height 69 inches. The lips were dry and cracked especially at the corners of the mouth. The tongue was slightly red, swollen and sore but not extremely so. The membranes of the mouth and gums were of normal color but were slightly sore. There was no discoloration of the skin of the face, neck, arms, forearms, or legs. There was reddish-brown discoloration of the dorsal surfaces of both hands, stopping at the coat sleeve level and at the edges of the dorsal surfaces. The deep reflexes were all present and active. The heart sounds were weak, rate 84 per minute; there were extra systoles about every sixth beat. The lungs were clear. There was pitting edema of the feet, ankles and legs halfway to the knees. There was no ascites. Urinalysis and hemogram were normal, Kahn reaction was negative, sputum negative for tubercle bacilli, and the E.K.G. showed frequent auricular premature beats but was otherwise normal.

The patient was considered to have cardiac decompensation and was put on a regimen of rest, diet, digitals and general supportive measures including polyvitamin therapy and niacin 100 mg. twice daily. Improvement was immediate. The cardiac decompensation was under

fair control within five days and his cough and edema had disappeared. The lack of appetite was improved in three days, the soreness of the mouth and tongue was gone in three days and the dryness and cracking of lips were greatly improved after seven days. The skin of the backs of the hands turned from reddish-brown to dark brown after three days, and two days later began to desquamate leaving a lighter, spotty, brownish discoloration. He was discharged 15 days after admission and has been seen every week since. He has been kept in a state of cardiac compensation by a careful regimen. His hands remain slightly discolored, but his tongue and mouth are not sore; he continues, however, to have excessive salivation, which is most irritating to him.

#### SUMMARY AND CONCLUSIONS

The case histories of two patients are presented, with evidence of each having had pellagra. The first patient was a chronic alcoholic who had lived on Japanese sake and a very deficient diet for many years. He presented the classical picture of pellagra but probably had a polyvitamin deficiency as well. Long exposure to sunshine seemed to precipitate periodic recurrences of his outstanding sign and symptom, dermatitis of the hands and wrists. He died in a state of mental confusion 13 months after first being seen.

The second patient is believed to show evidence of the pellagrous state associated with cardiac decompensation. Improvement took place immediately after niacin was given and cardiac compensation was established. The evidence in this case is not as conclusive as in the first.

Both of these cases probably had pellagra for two reasons—first, inadequate intake of needed vitamins; second, poor absorption of the vitamins ingested due to gastro-intestinal dysfunction; third (in case 1), increased need due to high caloric intake in the form of alcohol.

Pellagra probably occurs in Hawaii only under circumstances similar to those presented by these two patients. In any chronic disease which is associated with gastro-intestinal dysfunction a deficiency of niacin, as well as other vitamins, must be looked for and guarded against. It is wise to treat all such patients, including patients undergoing gastro-intestinal surgery, by parenteral injections of niacin and other vitamins until such time as normal absorption is assured. These are believed to be the first cases of pellagra to be recorded in medical literature from the Territory of Hawaii.



# COLD AGGLUTININS IN VIRUS TYPE PNEUMONIA

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HONOLULU

**H**ERE are two case reports that may teach a lesson.

CASE 1. A man comes into the office from one of the housing areas. Occupation listed at the desk as "Unemployed." You know what that means. He had two strikes against him from the start. He looked like a homing pigeon. First impression "Malingerer." Chief complaint: The doc in the area had found a spot on his lung; did it amount to anything?

Here are the brief notes on his history card as recorded by the clinician: "A.P. CHA 3, Dispensary. Unemployed. Temperature 99° F., age 30, a welder. Chest x-ray taken at Pearl Harbor showed a spot—stopped his work and they are sending him home. Feels well, no cough except with a cold, but colds have been frequent. A brother had TB seven years ago. No sputum examination. Wants to know if it is TB or not. Physical examination negative. Blood pressure 120/70. Heart and lungs negative to auscultation. X-ray he brings shows infiltration at right apex. Could be TB or virus type pneumonia.

Sputum: WBC +++, diplococci +++++, staph. +++, diphtheroid ++, tubercle bacilli negative.

Repeat chest x-ray: probable extensive, active tuberculosis in right upper. Atypical pneumonia a possibility. "Icyagglutinins" (cold agglutinins) negative, even in a 1:2 dilution."

It is obvious from this that the clinician was in a hot spot for a wiki-wiki [Ed.: "prompt"] diagnosis. They don't hold boats long for welders and the ships run not too often. The best bet was TB but the sputum was negative. No time for many repeated examinations or sputum concentrations, nor time for cultures. The one deplorable error might be the confusion of exudative tuberculosis with virus type pneumonia, which is becoming uncomfortably common in Honolulu. Had it been virus type pneumonia, still with a fever of 99°, he should have had diagnostic cold agglutinins—but didn't. So the best bet really was TB and he was on his way home rather than cluttering up Leahi, already full.

CASE 2. One of our own American citizens of Chinese ancestry—not very good military material, as you will see from the brief notes of the clinician on his history card. "Y.H. Weight 109 pounds. Age 45. Temperature 98°. Asthenic. Cough 2 months. Auscultation negative. Blood pressure 110/70. Urine, pH 5.5 and negative. X-ray of chest, atypical pneumonia, left base with some question of the left apex. Could be TB. Hemoglobin 14 Grams. Had fever of 102° last week, was in bed three days. Treatment symptomatic."

Five days later: Temperature 98.8°, left basal lesion still visible. "Icyagglutinins" four plus in 1:128, plus-minus in 1:256 (Diagnostic titer 1:32 or up).

Read before the fifty-fifth annual meeting of the Hawaii Territorial Medical Association, May 5, 1945.

This case, when the patient first came in, was not clear cut; he had coughed for two months but had been acutely sick only for a week or so. It could have been either virus type pneumonia or an exudative TB. It makes a big difference to the doctor, to Leahi and to the patient. The chest x-ray spoke for virus type pneumonia but it is a brave roentgenologist who will stick his neck out that far on one film. For virus type pneumonia, at present, there are no known laboratory confirmatory tests nor even helps, except the cold agglutinins. These, in this case, confirmed the clinician in his primary hunch, saved him a lot of time and the patient a lot of money for serial x-rays.

## WHAT ARE "COLD AGGLUTININS"?

Their proper name is "cold iso-auto-hemagglutinins," which I have abbreviated to "icyagglutinins." An iso-agglutinin is one which will agglutinate red cells of some individuals of the same species. An example of this is found in the serum of a Type A individual, which will agglutinate the red cells of Type B or AB, but not his own, nor those of another Type A nor those of a Type O individual. Such agglutination takes place at 56°, 37°, 20° and at 4° C. Once the clumps have formed the reaction is not reversible at any other temperature. This is the test you depend upon for a successful transfusion.

But, under unusual circumstances, this Type A serum *will* agglutinate its own cells, or those of another Type A and those of a Type O, not at 37° but at 4° and occasionally at 20°. The agglomerations of red cells, created at 4°, when brought to 37° are destroyed but reform when replaced in the 4° refrigerator. These, then, are the "cold auto-iso-hemagglutinins," which we have nicknamed "icyagglutinins."

## HOW DO YOU PERFORM THE TEST?

Bleed the patient as for a Wassermann. Clot, centrifuge and with a capillary pipette remove all available serum. Then insert the pipette to the bottom of the tube and remove about 0.1 cc. of those red cells not incorporated in the clot. Transfer them to 15 cc. of saline in a graduated centrifuge tube. Invert several times, centrifuge, decant and make up with saline to about a 2 per cent suspension.

Make up nine serial, two-fold serum dilutions of 0.5 cc. each, with a saline control, beginning with a dilution of 1:2 or, if there is insufficient serum, 1:5. To each tube add one drop of the cell suspension. (Washed Type O cells may be used but the homologous cells are to be preferred.) Incubate overnight in a cold ice box but do not freeze. Read the tubes *immediately* after removing from the refrigerator. Shake the tubes gently. One solid lump of red cells = + + + +; agglutinations that may need a hand lens to be seen = +. Confirm the nature of the agglutinations by placing at 37° C, where the agglutinations disappear.

#### WHAT IS THE DIAGNOSTIC TITER?

A number of febrile diseases produce these agglutinins in low dilutions of the serum, but very rarely above 1:16 or 1:20. We have come to accept agglutination in or above a titer (by this method) of 1:32 as diagnostic, just as, by the method we use, agglutination of sheep cells in or above a titer of 1:600 constitutes a diagnostic heterophile reaction for mononucleosis (modified Paul and Bunnell reaction). The majority of positive cases range between 1:120 and 1:480, but may go to very high dilutions. Our first case of virus type pneumonia studied with the cold agglutinins went well above 10,000 and the concentration of agglutinins was so great, or they were so active, that they agglutinated homologous cells at room temperature (72° F. or 22.2° C.), as well as at 4° C.

#### HOW EARLY, IN VIRUS TYPE PNEUMONIA, DO THEY APPEAR?

Since the disease usually has an insidious onset, it is difficult, sometimes, to say. However the consensus seems to be that they appear in a rising titer between the fourth and tenth day.

#### HOW LONG DO THEY STAY?

The consensus is that "they disappear rapidly after convalescence" but our first case had a titer of 1:512 fifty-five days after the onset of the disease, which had lasted less than three weeks.

#### ON WHAT FACTORS DOES THE STRENGTH OF THE AGGLUTININS DEPEND?

It is said that the number of days of illness and the height of the fever are the determining factors, but I am of the opinion that the amount of lung tissue involved is the dominant factor; our first very high titer case had involvement of more than two-thirds of the lung fields. Later cases with smaller areas involved had lower titers.

#### WHAT CONDITIONS OR DISEASES, OTHER THAN VIRUS TYPE PNEUMONIA, INTERFERE?

These cold agglutinins are said to appear regularly in trypanosomiasis. I do not know who first made that statement but every one seems to copy it and thereby make medical literature. Certain vascular diseases such as Raynaud's disease may cause confusion. Yaws, and a racial tendency among Melanesians and Malaysians, are said to be factors; I wouldn't know. Leprosy has been mentioned as giving rise to confusion. Through the kindness of Dr. Sloan and Mrs. Fredricks, at Kalaupapa, 14 leprous bloods have been examined, with negative results.

Early reports mentioned tuberculosis, but ample later work showed that this disease does *not* interfere with the reaction. This is most important. Bacterial pneumonias do not interfere.

The only important confusing disease may be infectious mononucleosis. Seven cases of this disease with high-titer heterophile reactions are reported in the literature as having icyagglutinins well within the diagnostic range. We ourselves have had, recently, 7 clinical cases of mononucleosis; 5 had heterophile titers just within the diagnostic range (our diagnostic threshold is 1:600) but icyagglutinins below 1:32 or wholly absent. However, we have had two clinical cases, the blood picture not particularly characteristic of mononucleosis, but with high heterophiles—one of 1,200 and the other of 6,400—both of which had icyagglutinins within the diagnostic range: the first to 64, the latter to 160.

It seems then that in virus type pneumonia, if reliance is to be placed on the icyagglutinins, infectious mononucleosis must be ruled out. For this purpose, neither the blood picture nor the heterophile reaction is always entirely adequate.

It is interesting to note, in passing, that these agglutinins for sheep cells in the heterophile reaction are semi-reversible; they usually show a higher titer at 4° than they do at 37°, the agglomerations in the highest dilutions at 4° disappear at 37° but those in the lower dilutions are permanent.

Measles, which has several times been mentioned as a confusing factor, deserves further systematic investigation, particularly in the pre-eruptive stage. Mumps with orchitis is said to give a positive reaction.

Endemic (murine) typhus, which gives non-specific agglutination of Proteus X-19 in high titers (most normals give it in low titers) for this very reason should also be further investigated for icyagglutinins. I would be deeply grateful for bloods from typhus cases. Recently we have had

one case with high X-19 agglutination which gave us weak, but confusing, icyagglutinations within the diagnostic range.

WHERE CAN I READ UP ON THIS SUBJECT AND

WHERE, IN HAWAII, IS THIS LITERATURE  
AVAILABLE?

I append a list of the articles I have found useful; all the cited references are available at the Honolulu County Medical Library in the Mabel L. Smyth Memorial Building.

#### CONCLUSION

I conclude that the icyagglutinins are quite as specific in virus type pneumonia as are the serologic tests for syphilis on which you rely today so implicitly that you have made them a part of your legal set-up. They are as useful as the heterophile in mononucleosis and as the Weil-Felix in murine typhus. I fear that atypical pneumonia, alias virus type pneumonia, is prevalent among us at present, to a far greater extent than most of us suspect. This laboratory diagnostic aid, these icyagglutinins, should be welcome to the soon to be overburdened clinician of Hawaii.

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# PENICILLIN THERAPY IN PURULENT MAXILLARY SINUSITIS

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THE present methods of treatment of chronic purulent sinus disease leave much to be desired. Prior to the advent of chemotherapy, surgical procedures, while satisfactory in many instances, in others failed or resulted in only partial success. It is frankly admitted by most otolaryngologists that all of the diseased mucous membrane cannot be removed from all of the sinuses without running grave risk of complications much more serious than the disease itself. The radical removal of a great deal of tissue from the nose also disturbs nasal physiology.

With the discovery of the sulfonamide drugs it was generally hoped that an answer had been found. The results of the use of these compounds both locally and systemically have been disappointing, though there have been many brilliant successes in the therapy of the acute complications of sinusitis such as meningitis, osteomyelitis and cavernous sinus thrombosis. It is significant that Salinger<sup>1</sup> in a review of the literature on sinus disease for 1943 does not report on any conclusive article in favor of sulfonamide therapy. Neither in 1942 or 1943 were there any articles reviewed on systemic treatment of sinus disease by these drugs. Fabricant,<sup>2</sup> writing about the local use of sulfonamides in nasal and sinus infection, states that the evidence in favor of their use is not conclusive, and some of the preparations used are harmful. Whalen<sup>3</sup> makes a logical comment regarding the local use of sulfonamides, which should apply to any drug. He states: "The sulfonamides are not effective as bacteriostatic agents when used on the unbroken surface of the skin or of the mucous membrane and for this reason it seems illogical to use solutions or suspensions of these drugs for local application to the mucous membrane of the nose with the expectation that the disease-producing organisms which are in the soft tissues will be controlled. The oral or intravenous administration of these agents is the only means by which they can be brought in contact with the disease producing organisms." He further states that the drug must be used only in acute infection, before the area is closed off by thrombosed vessels. He offers no proof of the latter statement, so it is open to question. It is

unfortunate that there are no detailed studies of the use of these preparations by mouth in chronic sinusitis, as one might expect curative results in certain cases.

As nearly as can be determined from the literature available, the first mention of penicillin in disease of the accessory sinuses of the nose was made by Crowe<sup>4</sup> in 1943. He believed its use locally would be of benefit but reported no results. Kolmer<sup>5</sup> in 1944 also referred to its possible use by local application, particularly in staphylococcus, streptococcus and pneumococcus infections, but stated that it appeared to be ineffective against hemophilus influenzae and Friedländer's bacillus.

The literature of 1943 does not contain any record of the systemic use of penicillin, nor have I been able to find any such reports in 1944. There is one excellent article by Ball<sup>6</sup> on its use in acute otitis media and mastoiditis in which 12 cases of scarlatinal otitis media with mastoiditis and five similar non-scarlatinal cases were treated with dosages varying from 360,000 to 2,800,000 oxford units with one failure in a scarlatinal case. All had been treated unsuccessfully with sulfadiazine.

A comparatively large series of cases is presented by Koebbe and Potter<sup>7</sup> covering the use of penicillin in the treatment of the complications of otitis media with 100 per cent recovery from meningitis, sinus thrombosis, labyrinthitis and encephalitis, with less satisfactory results in brain abscess. The drug was combined with sulfadiazine.

Sale and Diamond<sup>8</sup> report a case of maxillary sinusitis treated with penicillin. They used an antrum needle, left it in place, and injected 5000 units every three hours for 8 doses. This was repeated eight days later after polyps had been removed from the nose. A staphylococcus infection was present. The purulent manifestations were cured but the hyperplasia, while reduced, was still present. In the early part of 1944, one case was treated in a similar manner at the Hilo Memorial Hospital for three days with penicillin made locally, without effect.

The reports on the use of penicillin so far have come from the armed services, where the supply has been greater than in civilian practice. With the increased stock of the drug undoubtedly there

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will be greater use of it in chronic diseases. The comparative innocuousness of penicillin makes it an especially suitable agent for this purpose.

The present report covers the use of penicillin in six cases of purulent maxillary sinusitis seen at Puumale Hospital and in private practice. While other types of sinus disease have been treated they will not be included because of the difficulty in establishing satisfactory criteria of cure. The diminution or disappearance of exudate in the washings was considered objective evidence of improvement. In all cases the preparation was given intra-muscularly in doses of 10,000 units every three hours unless otherwise stated.

#### CASE REPORTS

CASE 1. A. A., a Japanese woman, age 18, was admitted to Puumale Hospital on December 27, 1944, with minimal pulmonary tuberculosis. Routine examination revealed purulent discharge in the nasopharynx. The right antrum was cloudy on transillumination. Lavage of this sinus produced a large amount of exudate with a foul odor. Dental examination was negative. Thirteen weekly lavages thereafter did not result in improvement. Smear of the washings taken on April 10, 1945, showed gram positive cocci which were not identified. Aerobic and anaerobic cultures were negative. Penicillin was started intramuscularly on April 12. A total dosage of 400,000 units had been reached at the end of one week, when the washings were clear, and they have remained so to date.

CASE 2. J. A., a Filipino man, age 50, was admitted to Puumale Hospital on November 13, 1944, with far advanced pulmonary tuberculosis. Routine examination did not show exudate in the nose or nasopharynx but the antra did not transilluminate well. Lavage did not produce any exudate from the left side, but the right antrum contained pus with a foul odor. Dental examination was negative. Tyrothricin, 20 mgm. per cent, was used as nose drops 4 times daily from December 21, 1944, to March 6, 1945, without demonstrable benefit. Thirteen weekly irrigations did not produce any change. Unfortunately no smears or cultures were studied. On March 15, intramuscular penicillin was begun. Five days later the amount of discharge had diminished and the odor had disappeared. The injections were continued and on March 27 the washings were clear and have remained so to date. The total dosage in this case was 960,000 units.

CASE 3. R. C., a Filipino man, age 47, was admitted to Puumale Hospital on November 10, 1944, with far advanced pulmonary tuberculosis. Routine examination revealed considerable purulent discharge in the middle meati and in the nasopharynx. The antra were cloudy on transillumination. Lavage produced no exudate from the right but considerable pus from the left side. Tyrothricin, 20 mgm. per cent was used as nose drops 4 times daily from December 21, 1944, to February 14, 1945, without demonstrable benefit. Weekly lavages failed to produce any beneficial result. On March 15, 1945, intramuscular penicillin was begun. When 400,000 units had been given, an irrigation through the natural opening produced a clear return. Penicillin was discontinued. One week later the antrum contained a large amount of pus. Because of the character of the tissues

in the middle meatus it was considered probable that the trocar had not been in the antrum when it was irrigated the week before. Smears and cultures taken on April 3 were negative. Penicillin was again begun on April 4 and continued until a total of 1,040,000 additional units had been given. At this time, April 17, there was no decrease in the amount of exudate. On this date sulfathiazole was started by mouth, 60 grains (4.0 grams) daily in divided doses. On April 24 there was only a small amount of exudate present. On May 1, a large amount was found. This case will have radical antrotomy done if his chest condition will permit it.

CASE 4. R. M., a Hawaiian man, age 64, was admitted to Puumale Hospital on May 22, 1944, with moderately advanced pulmonary tuberculosis complicated by bronchiectasis. Routine examination revealed atrophic rhinitis with crusting in both nostrils and purulent discharge in the nasopharynx. The antra were cloudy on transillumination, more on the left than on the right. Lavage produced no exudate from the right but considerable fluid pus was present on the left side. Dental examination was negative. Weekly lavages thereafter produced no change. Tyrothricin, 20 mgm. per cent, was used as a nasal spray four times daily from October 31, 1944, to January 12, 1945, without demonstrable benefit. A course of intramuscular penicillin in October, 1944, consisting of 200,000 units, was given. This was during the time when there was a limited supply; and while there was slight decrease in the amount of exudate, it was discontinued because of lack of the drug. On March 29, 1945, smears and aerobic culture of the washings were negative. An anaerobic culture showed gram negative bacilli which were not identified. Penicillin therapy was begun on March 20. At the end of two weeks it was believed there was some improvement. Slight further improvement was noted at the end of another two weeks, when 1,900,000 units had been given. On April 24, the condition appeared to be stationary, so the drug was discontinued and sulfathiazole, 60 grains (4.0 grams) daily was started by mouth. On May 1, there was little exudate, so this latter drug is being continued. This case will probably require operation as he is being considered for discharge.

CASE 5. P. C., a Caucasian-Hawaiian girl, age 11, was first seen on March 13, 1945. She had had a cold for about three weeks with persistent nasal obstruction and discharge on the right side. There was purulent discharge in the right middle meatus and the right antrum was cloudy on transillumination. Lavage produced a moderate amount of discharge with a foul odor. Dental examination was negative. Two subsequent irrigations on March 16 and 19 did not improve the condition; in fact, it appeared worse. On March 21, irrigation could not be carried out because the mucous membrane was so inflamed it could not be anesthetized. She was admitted to the Hilo Memorial Hospital. No culture was taken at this time, because the antrum could not be irrigated. Penicillin, 5,000 units intramuscularly every 3 hours, was given for the first two days; the dosage was increased to 10,000 units after that. The inflammation subsided at a moderate rate. She was dismissed on March 30, having had three irrigations while in the hospital. The total dosage of the drug was 400,000 units. At the time of discharge there was very little exudate in the sinus. On April 9, the washings were clear.

CASE 6. N. I., a Japanese girl, age 9, was referred by Dr. R. T. Eklund on April 6, 1945, with the complaint of repeated colds and nasal obstruction. Nasal symp-



toms had been present for about three years. There was purulent exudate in the right middle meatus and in the nasopharynx. The right antrum was cloudy on transillumination and irrigation produced a moderate amount of purulent exudate from this sinus. Dental examination was negative. A culture was taken and a heavy growth of *H. influenzae* and a few scattered colonies of hemolytic streptococci found. She was sent back to Pahala where Dr. Eklund instituted penicillin therapy. She was given 400,000 units and came in for antrum irrigation. Only a small amount of exudate was present. An additional 400,000 units was given and on April 25, the washings were clear.

#### COMMENT

This series is too small to do more than point the way to further study. Purulent maxillary sinusitis is extremely variable in its response to treatment by irrigation. One frequently feels that sufficient irrigations have been done without result to warrant surgery, only to find that on the next lavage the condition has improved markedly. For this reason, one should not hail a spectacular result as a cure to be credited to a new agent when irrigations are being carried out.

The importance of cultures should be emphasized. It is frequently difficult or even impossible to get uncontaminated cultures from the antrum. However, it should be pointed out that in Case 1, a gram positive organism was found, and this case responded quickly to penicillin. She had had conservative treatment without results for a sufficient length of time so that if penicillin had not been given, surgery would have been done. Case 2 was also ready for surgery but this was averted by penicillin. Cases 3 and 4 will probably be operated on. Whether the last two cases would have required surgical intervention is problematical. It is interesting to note that Case 6 responded to treatment in spite of the fact that the predominant organism was *H. influenzae*, which is not supposed to be affected by the drug. Certainly, no conclu-

sion as to the effect of penicillin can be drawn from this one case.

The question is still open as to how much penicillin to give before concluding it has no effect. It would seem that if no apparent improvement is seen after a million or so units have been given it is not necessary to subject the patient to the expense and discomfort of further treatment. However, Ball<sup>6</sup> used as much as 2,800,000 units in mastoiditis.

In conclusion it is logical to assume that penicillin will be of value in certain cases of sinus disease. In order that this form of treatment may be properly evaluated, careful studies should be made to determine which ones may be expected to respond, for the promiscuous use of the drug will result in many failures which may obscure its true value.

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### [EDITORIALS]

#### WELCOME, NURSES!

The HAWAII MEDICAL JOURNAL, the official publication of the Hawaii Territorial Medical Association, becomes with this issue the official publication of the Hawaii Territorial Nurses' Association as well. Publication of *The Bulletin* of the latter organization has been discontinued, and each member of the Nurses' Association has subscribed to THE JOURNAL instead. A separate section of each issue will be devoted entirely to the nurses; it will contain news items, announcements, and case reports, all written by nurses and for nurses. It will be called, like the publication it replaces, *The Inter-Island Nurses' Bulletin*; and it will continue under the editorial direction of Mrs. Alice A. Scott, the chairman of the Bulletin Committee of the Nurses' Association.

This step, which is so far as we know without precedent, should prove beneficial to both physicians and nurses; each group should profit from this opportunity to learn more about the other. The material advantage to THE JOURNAL in the form of increased revenues from subscriptions, from higher advertising rates, and from a wider field from which to secure advertisements, is likewise a significant consideration.

#### MENTAL HYGIENE SOCIETY MEMBERSHIP

Mental health is an important factor in the incidence of both mental and physical illness. Doctors have an important stake in the mental health of the population at large. Better mental health for the people of the Territory of Hawaii is the goal of the Hawaii Territorial Society for Mental Hygiene.

The welfare of this society, and its power to promote better mental health for the community,

are dependent upon its numerical strength and its financial solvency. Doctors and nurses alike are urged to join it if they have not done so, and to renew their membership for the coming year if they are already members. On the last page of this issue will be found a membership application form for your convenience. Please use it!

#### THE EYE BANK

The Eye-Bank for Sight Restoration, Inc., has been established in New York City as the first step in a plan which includes the eventual establishment of a nation-wide eye bank for making healthy corneal tissue available to persons blinded by corneal opacity. The obviously praiseworthy aspects of this effort have led some well-meaning people to inquire whether we should not have a branch of the institution established in Hawaii. The answer to this question is an unqualified *No*.

Literature distributed by the Eye-Bank states, "It is estimated that the sight of five to seven per cent of blind persons has been lost through opaque corneas." It is a little difficult to reconcile this statement with the fact that not one of the five hundred odd blind persons known to the Hawaii Territorial Bureau of Sight Conservation and Work with the Blind falls into such a category, and the fact that only one questionable candidate for corneal transplantation is known to a Honolulu ophthalmologist who has practiced here for six years.

We need no Eye-Bank here. Still less do we need publicity which raises false hopes of cure in the minds of blind people who can *not* be helped by corneal transplantation. It is evident that we have so few such persons in Hawaii—if indeed we have any—that it would be far simpler and cheaper to bring them to the Eye-Bank than to bring the Eye-Bank to them.

## THE JOURNAL GETS A NEW HAT

With this first issue of 1946, the HAWAII MEDICAL JOURNAL makes its first appearance in what automobile manufacturers call "a new hat"—an improved external appearance without any basic underlying changes. The reason for this is a change of printers, from Watkins Printery to the Honolulu Star-Bulletin plant, a move suggested to us by Mr. Watkins some time ago and only recently made possible by a combination of circumstances.

The change in turn makes possible several new features. Printing will now be done by the letter-

press instead of the offset method, with a resultant improvement in the appearance; this also permits the change to the standard size of 8 by 11 inches to conform with most other State medical journals. A more suitable weight and quality of paper can now be used, and separately printed covers will no longer be necessary. It will also be possible now to handle colored advertisements.

This is the first radical change of format in the four and a half years of THE JOURNAL's existence; it will probably be the last until the day when we can advance our publication schedule from bi-monthly to monthly.

### TO THE EDITOR:

The post war health planning group's sub-committee on parasitology has suggested the inclusion of a division of parasitological research in the Bureau of Laboratories of the Board of Health. There are no doubt many physicians who for a variety of good reasons will support this suggestion. As an individual I recommend the development of this parasitological research division for the following principal reasons:

1. We would expect, with Hawaii having become such a crossroads, a staging center, a reassignment center, a place to which many service men are returned from nearly every point of the compass, by slow boats, fast boats and planes, that we have had or will have many diseases or disease vectors brought here which up to now have not been a major problem. It would seem that the suggested research division is indicated to study these problems *now*.

2. In the past not enough parasitological research has been done in conditions which we have known to be present and which *may* lie in this field. As an example many physicians have agreed with me that they have seen a number of Filipinos who complain of spitting of blood and all studies have failed to reveal the cause and follow-up over a period of years has proved these patients not to have tuberculosis. Are we dealing here with pulmonary distomiasis?

3. At the risk of being accused of being too interested in one disease I would add Weil's disease to the problems that need study of this kind. Probably more research has been done on this disease than any other parasitological condition occurring in man in Hawaii, but I feel that not nearly enough has been done. Lately I have had two patients who had typical signs, symptoms and clinical courses of moderate Weil's disease as I have observed the disease in 57 patients proved

to have the disease. Blood serum agglutination tests done by three laboratories in the Territory by two methods have been repeatedly negative against antigens of *Leptospira icterohemorrhagiae* and *Leptospira canicola*. Dr. K. F. Meyer of the Hooper Foundation in San Francisco has likewise found these sera negative with these two antigens. I asked him to run these agglutinations with antigens of *L. pomona*, *L. hebdomadis* and *L. febrilis* which on other islands and continents have been proved to cause diseases and fevers evidently due to Leptospiral infections. He is unable to run these tests now due to war-time limitations of personnel. I believe that quite possibly we have Leptospiral infections in the Territory due to strains other than *L. icterohemorrhagiae* and *L. canicola*. Though "catarrhal jaundice" is seen here amidst patients with Weil's disease and patients with the former condition certainly don't present the clinical picture of the latter, I wonder if "catarrhal jaundice" may not be a leptospiral infection; and if not, might we not have a good chance of finding its cause if such a research division were active here? With eye complications occurring in about 15% of my series of Weil's disease cases I see the need for more research. Last November I removed one kidney of a patient who had severe Weil's disease in *March 1942*. The gross pathological picture of this kidney is such as I have not seen before. I will send sections of it to those laboratories that have been doing our other work on this disease but I feel again the need of a parasitological research laboratory in the study of this problem.

I recommend that the Medical profession in the Territory support the establishment of a division of parasitological research in the Bureau of Laboratories of the Board of Health.

H. M. PATTERSON, M.D.

November 27, 1945.



## COUNTY SOCIETY REPORTS

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### HAWAII COUNTY MEDICAL SOCIETY

The semi-annual September Hawaii County Medical Society meeting was called to order by Dr. W. Leslie, President, at the Corporation Evacuation Hospital No. 1 in Kamuela on August 23, 1945, at 7 p.m. The society was the guest of Captain Borst, commanding officer of the hospital. A delicious steak dinner was enjoyed by all, prior to the meeting which was immediately turned over to the hospital staff.

The central theme of the evening was jaundice. The first speaker was Dr. H. M. Patterson of Olaa, who read a paper on Weil's disease and summarized the 55 cases personally seen by him in the past four years. Dr. Hale, Chief of Surgery, then spoke on the surgical aspect of jaundice, and Commander Sterner, Chief of Medicine, spoke on jaundice from the medical viewpoint. General discussion followed.

After a brief intermission, Captain Borst spoke on post-war medicine.

Meeting was adjourned at 9:45 p.m.

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The 243rd regular monthly meeting of the Hawaii County Medical Society was called to order by Dr. W. Leslie in the Hilo Memorial Hospital Staff room on October 4, 1945 at 7:22 p.m. Eleven members and two guests were present.

The scientific program of the evening was a paper on the Sulkowitch test of urine in the diagnosis and management of hypocalcemic tetany in infants, by Dr. T. Yoshina.

The question of the purchase of the O.C.D. movie projector with sound attachment and accessories less 40 per cent, which amounts to \$210.00, was deferred because Dr. Leslie thought the Tuberculosis Association was planning to buy one and that this society should be able to rent it when needed. In a later communication from him, it was learned definitely that they had bought a 16 mm. projector with sound attachment and that our society may use it providing an experienced man is to run it.

The secretary announced that the application forms for fellowship in the A.M.A. were now available.

The secretary read a communication from the National Physicians' Committee concerning the

educational value to the people at large of a series of newspaper advertisements against the evils of the Wagner-Murray-Dingell Bill. Finally Dr. Yoshina moved, seconded by Dr. Roll, that the entire matter be left up to the Territorial Medical Association Councillors.

A communication from W. R. Carter was read stating that the Board of Directors of the Hawaii Medical Service Association took action to proceed with negotiation leading to the establishment of the medical and hospital plan on the island of Hawaii. Mr. Moir had been requested to look for office space in Hilo and several prospective managers for this office were now being considered.

Dr. Patterson announced that the plantations had extended the so-called free medical service to include all employees of the plantations. The subject had been discussed at length in the Honolulu County Medical Society with the suggestion that all plantation doctors be expelled from this society if they accepted a contract not approved as ethical by the committee on Forms of Medical Practice.

An opinion of the attorney general of the Territory concerning the expense of return of parolees to the Territorial Hospital was filed with the secretary. This stated that the expense of such return should be bonded by the counties and not by the Territory.

The meeting was adjourned at 9:04 p.m.

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The 244th regular monthly meeting was called to order by Dr. W. Leslie in the Hilo Memorial Hospital staff room at 7:30 p.m. Fourteen members and three guests were present.

Dr. W. J. Seymour of Kona was unanimously elected vice-president.

Among matters discussed were the question of free medical care to all plantation employees, the possibility of naming the new wing of the Hilo Memorial Hospital for Dr. F. Irwin and the procedure for the detention of mental patients at Hilo Memorial Hospital.

The scientific subject of the evening was Influenzal Meningitis, presented by Dr. Bergin of Pepeekeo.

The meeting was adjourned at 9 p.m.

S. MIZUIRE, M.D.,  
Secretary

## HONOLULU COUNTY MEDICAL SOCIETY

The Honolulu County Medical Society met on Friday, August 10, 1945, at 7:30 p.m. in the Mabel Smyth Auditorium. Dr. Bowles presided, and there were about 75 present. Mr. Peterson, the Squibb representative, presented a movie by Dr. Spies and Dr. Jolliffe entitled "Modern Nutrition." Dr. Cloward read a paper entitled "Depressed Fracture of the Vertex of the Skull, Treatment and Complications."

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A meeting of the Honolulu County Medical Society was held on Friday evening, September 21, 1945, at 7:00 p.m. in the Mabel Smyth Auditorium. This was a continuation of the Annual Meeting held April 6, 1945. Dr. Halford presided. There were 53 members present.

Dr. Halford presented the new fee schedule of H.M.S.A. for approval. This schedule was approved as issued.

The election of officers, postponed from the April meeting, was held at this time with the following results:

<i>President</i> .....	N. P. LARSEN
<i>Vice-President</i> .....	H. E. BOWLES
<i>Corresponding Secretary</i> .....	M. GORDON
<i>Recording Secretary</i> .....	H. C. GOTSHALK
<i>Treasurer</i> .....	H. L. ARNOLD, JR.
<i>Board of Governors</i> .....	T. H. RICHERT, R. N. PERLSTEIN, FRANK SPENCER
<i>Alternates, Board of Governors</i> .....	A. S. HARTWELL, JOSEPH LAM, L. L. BUZUID
<i>Board of Censors</i> .....	R. O. BROWN
<i>Hawaii Medical Service Association</i> .....	JOSEPH PALMA, C. L. WILBAR, JR., F. D. NANCE
<i>Committee on Forms of Medical Practice</i> .....	F. J. HALFORD

Since the new President was absent, Dr. Halford continued to preside.

Dr. Halford explained the new set-up in the County Society office. Miss Hayward had left to attend college on the mainland. Efforts to replace her were unsuccessful. Therefore Mrs. Bennett has been appointed Executive Secretary of the Honolulu County Medical Society as well as of the Hawaii Territorial Medical Association. Miss Shizuko Odo has been employed by the County Society to assist her.

Dr. Halford read a letter from Dr. P. H. Liljestrand, Secretary of the Oahu Plantation Physicians' Association, just received, stating "Now it has been reported to us that the trustees of the H.S.P.A. have recommended that beginning October 1, 1945, all plantation people from the manager down, regardless of income, shall be given free medical care by the plantation physician, whose salary it is recommended is to be adjusted accordingly." The plantation physicians have presented their objections to this proposal

before the trustees of the H.S.P.A. but have received no satisfaction.

A lengthy discussion of this problem followed, in which many members took part. The final action was as follows:

(1) It was voted that the Honolulu County Medical Society disapproves of the proposed change in medical care on the plantation.

(2) It was voted that the directors of the H.S.P.A. be notified that no member of the Honolulu County Medical Society can enter into any contract that is not approved by the Committee on Forms of Medical Practice.

(3) It was voted to refer the entire question to the Territorial Association for opinions from the other islands.

(4) It was voted that the letter to the H.S.P.A. include the offer of the H.M.S.A. as a mechanism for caring for the plantation workers.

(5) It was agreed that Mrs. Bennett, Dr. Halford, and Dr. Gotshalk should write the letter to the directors of the H.S.P.A.

Dr. Cloward mentioned the deplorable state of the Kuakini Street paving. The President was directed to draft a letter to the Board of Supervisors and the two newspapers, stating that the Medical Society wants immediate action to repair and put in good condition the whole of Kuakini Street, including the sidewalks.

A rising vote of thanks was extended to the President of the County Society for his services in the past year.

Dr. Pinkerton presented a form for physical examination, drawn up by the association and acceptable to all the insurance companies.

M. GORDON, M.D.,  
Secretary

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The Honolulu County Medical Society met on Friday, October 5, 1945, in the Mabel Smyth Auditorium at 7:30 p.m. Dr. Larsen presided. About 60 were present.

*Know the Truth*, a movie on syphilis, was shown.

Each committee chairman reported on the plans of his committee. Dr. Fennel stated there would be a meeting of the H.T.M.A. Council on November 8. Dr. Black was unable to be present to report for the Committee on Forms of Medical Practice. The Society wished him aloha for his silver wedding anniversary. Dr. Halford presented the report of that committee as follows:

The Committee on Forms of Medical Practice met on Friday, September 28, 1945, to discuss the problem of contract practice in relation to the new Hawaiian Sugar Planters' Association ruling which gives free medical care to all plantation people.



After going over the American Medical Association definition of contract practice, the last paragraph of which reads:

"Each contract should be considered on its own merits and in the light of surrounding conditions. Judgment should not be obscured by immediate, temporary or local results. The decision as to its ethical or unethical nature must be based on the ultimate effect for good or ill on the people as a whole."

it was the opinion of the committee that although they believed this move was not for the best interests toward improving medical care of the people on the plantation, nevertheless they did not feel it constituted a breach of ethics as defined by the American Medical Association and they recommended no action be taken against the plantation physicians.

The program consisted of a panel discussion on the subject: "How Can We Lower the Cost of Being Sick and Simultaneously Raise the Standards of Medical and Hospital Care?"

(1) By a hospital subsidy plan to be voted on by the next session of the Legislature.

(2) By subsidized laboratory diagnostic centers available to every doctor for his low income patients.

(3) By a plan for centralized hospital centers for rural Oahu."

The panel, who sat on the platform to lead the discussion, represented the new officers and Board of Governors. Drs. Arnold, Jr., Doolittle, Gordon, Gotshalk, Hartwell, Joseph Lam, Marshall, Perlstein, Richert, and Spencer were present.

Dr. Larsen opened the subject by reading some extracts and making some introductory remarks. The membership practically took the discussion from the Board of Governors in presenting the various sides of this important question.

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A special meeting of the Honolulu County Medical Society honoring the Territorial Association of Plantation Physicians at their second annual meeting was held Friday evening, November 9, 1945 at 7:00 p.m. in the Mabel Smyth Memorial Building. There were 160 present.

Two movies were shown—*Return to Guam* and *Attack on Okinawa*. An address of welcome was given by the president, Dr. Nils P. Larsen. The scientific program was as follows:

*Symposium on Fractures* (Chairman, Dr. W. T. Dunn, Maui).

- a. Common Mistakes in Treating Everyday Fractures of the Wrist, Ankle, etc. (Lt. Comdr. Charles W. Peabody, MC, USNR, orthopedic surgeon at Aiea Naval Hospital).
- b. New Methods of Treating Compound Fractures (Capt. Ernest M. Burgess, MC, USA).
- c. Prevention and Correction of Low Back Pain (Dr. S. F. Stewart, Honolulu).

*Symposium on Obstetric Care* (Chairman, Dr. H. M. Patterson, Hawaii).

- a. Prenatal Care: What is done at first visit, how often visits made, what measurements are important, should every woman have x-ray, etc. (Dr. G. C. Milnor, Honolulu).
- b. What Laboratory Work is Necessary: Blood typing, should a donor be ready for every patient,

what does the Rh factor mean and how should it be applied (Dr. I. L. Tilden, Honolulu).

- c. What Drugs, Glandular Products, Vitamins and the Like Should be Used in Prenatal Period: Pyridoxine for vomiting, polyvitamins, thyroid, calcium, when Vitamin K, use of Progestin for threatened miscarriage, etc. (Dr. W. B. Patterson, Maui).
- d. Analgesia During Labor (Dr. P. H. Liljestrand, Honolulu).
- e. Delivery Room Technique: Preparation of vulva and thighs, draping, masking of attendants, etc. (Dr. W. K. Chang, Honolulu).
- f. After Second Stage of Labor What Drugs Should be Used and by What Routes (Up to 48 hours after delivery) (Dr. G. C. Milnor, Honolulu).
- g. When Should Mother Get Out of Bed: How many days in hospital, care of breasts and nipples—is boric acid dangerous, should sulfathiazole be used, etc. (Dr. W. K. Chang, Honolulu).
- h. Care of Newborn Baby: Examination (especially heart, vagina, anus). Incubator, when to bathe, when to take to breast (Dr. W. B. Patterson, Maui).
- i. Care of Premature Infant (Dr. P. H. Liljestrand, Honolulu).

The scientific session was followed by a collation of beer and crackers.

H. C. GOTSHALK, M.D.,  
Secretary

#### KAUAI COUNTY MEDICAL SOCIETY

The regular meeting of the Kauai County Medical Society was held on Wednesday, July 11, 1945, at the G. N. Wilcox Memorial Hospital.

Members present were: Drs. Liu, Kuhn, Masunaga, Chang, Boyden, Wallis, Chisholm, and Harris. Guest: Capt. Gross, the acting officer for Board of Health of Kauai.

Minutes of the previous meeting were read and corrected. Approval followed correction.

Dr. Chisholm read a letter from Dr. Marks, concerning the making of x-ray examinations of food handlers. This letter was a reply to Dr. Chisholm's recent inquiries to the seeming unfairness of requiring food handlers to secure x-rays on the outside islands. It was felt by several members that Dr. Marks' reply did not solve the problem. Dr. Chisholm agreed to take x-rays of any food handler who did not care to pay the fees set forth by other laboratories.

Dr. Wallis read a letter concerning the fee schedule of the EMIC and letters of comment concerning the same. Dr. Wallis moved that the Workmen's Compensation fee schedule be the basic fee schedule to be adopted by the Bureau of Crippled Children. The motion was seconded and passed. Dr. Boyden moved that when a fee is to be paid in part by the parent and the Bureau of Crippled Children that the fee be determined by the parent and doctor. It was seconded and passed.



The H.M.S.A. is now established in Kauai. The Board of Directors includes: members of the Medical Society, Drs. Wallis, Brennecke and Umaki; business leaders, Messrs. Miyake, Watkins and Burns; members of the Association, Messrs. Ogata and Rawlston, and Capt. Sakoda; William Paea, representing labor. The Association now has 175 members and will begin to function immediately.

Dr. Boyden moved that the letter received from Dr. Wilbar concerning fees charged by the doctors in the Board of Health clinics be referred to Capt. Gross. Seconded by Dr. Chang and passed.

Capt. Gross talked briefly and informally with the members concerning public health problems on Kauai.

Meeting was adjourned at 10:15 p.m.

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No August meeting was held (quorum not present).

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The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital, Wednesday, September 12, 1945, at 7:00 p.m.

Members present were: Drs. Liu, Chang, Boyden, Umaki, Harris, Masunaga, and Wallis.

Dr. Boyden was elected vice-president to replace Dr. Hata, who had transferred to Honolulu.

It was pointed out by Dr. Wallis that the Territorial Medical Society was to have changed its by-laws so as to provide a president-elect, and that such a change would require approval of each constituent Society and consequently require some time. Therefore, it was moved by Dr. Wallis that the Society write to Dr. Fennel inviting him to Kauai and at the same time inquiring as to what has been done by way of changing the by-laws so as to provide for president-elect. Seconded and passed.

The ever-recurring and unsolved problem of housing psychotic patients awaiting transportation to Honolulu was discussed. A case was cited by Dr. Wallis in which recently a patient was re-

moved from the County Jail and died of starvation one day after admission to the hospital. Another case was mentioned in which the patient's general condition and progress was being affected adversely from being detained in jail. Dr. Wallis made a motion that Dr. Chang, as Chairman of the Psychiatric Committee, acquaint the County Attorney with these cases and send copies of the letter to the Chief of Police, the Board of Supervisors, and the Board of Trustees of the G. N. Wilcox Memorial Hospital. Seconded and passed.

The Fee Schedule Committee was requested to prepare a schedule to cover the more common and frequent medical services.

Dr. Masunaga was appointed to replace Dr. Hata on the Fee Schedule Committee.

Dr. Wallis moved that the Society pay Mr. Motoda \$5.00 for his services in operating the motion picture projector. Seconded and passed.

It was the opinion of members present that if the scientific portion of our meetings is to be worthwhile, cooperation and participation of the members must be 100 per cent.

Meeting adjourned at 9:40 p.m.

H. W. HARRIS, M.D.,  
*Secretary*

#### MAUI COUNTY MEDICAL SOCIETY

A regular meeting of the Maui County Medical Society was held at the Wailuku Hotel September 30, 1945.

Members present: Drs. von Asch, presiding; Balfour, Patterson, K. Izumi, Kanda, Osmers, Rothrock, Lightner, McArthur and Sanders. Guests: Drs. Arnold, Jr., Ianne and Beule.

The possibility of using newspaper space on Maui to counteract the publicity for the Wagner-Murray-Dingell Bill was discussed, but no action was taken. There was also discussion of the unannounced action of the H.S.P.A. concerning free medical care for skilled labor on the plantations.

Dr. Arnold spoke on the treatment of circumscribed neurodermatitis.

JOHN SANDERS, M.D.,  
*Secretary*

# PSYCHIATRIC COMMENT

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## REEMPLOYMENT OF NEUROPSYCHIATRIC DISCHARGEES

I wish to present a few points regarding rehabilitation, and particularly reemployment, of NP dischargees. NP means neuropsychiatric, a term which ordinarily embraces all diseases and all conditions within the fields of neurology and psychiatry, from a severed nerve to the most profound "insanity." However, the dischargees referred to are chiefly psychoneurotics, suffering from minor emotional disorders. It is hoped that these remarks will be of assistance to you as physicians who see neuropsychiatric patients before and after their release from the armed forces, and that you will pass them along to business executives, employers, and others concerned. The comments herein are especially referable to veterans, but are also applicable to rejectees from the Selective Service System, and to other civilians as well.

Much has been written about the magnitude of the problem of rehabilitation, the large number of neuropsychiatric rejectees from the Selective Service System, and the large number of neuropsychiatric dischargees from the armed forces. Many articles concerning these problems and their proper management have appeared in both professional and lay publications. This publicity has aroused considerable protest from some members of the armed forces and from writers in a number of newspapers and periodicals. The essence of these complaints is that we at home are attempting to make problem children of all our GI's. There has also been a certain amount of shame and concern on the part of the NP dischargees themselves because they have been discharged for such reasons and have no wounds to show the folks back home. Locally, as well as nationally, there have been similar protests against plans for assistance of persons discharged from the armed forces. It has been suggested that they should be allowed to go their own way, that they will be quite able to take care of themselves, and that the GI Bill of Rights, etc. will adequately care for their needs without a lot of meddlesome rehabilitation. Much concern has been expressed by various industrial leaders and much apprehension shown over employing persons who were discharged under section 8 or other sections covering neuropsychiatric disability. Apparently, the idea has got about that

there will be many psychotic veterans who will have to be absorbed by industry.

The problem of nervous and mental illness is large. The number of maladjusted persons in civil life is tremendous, as evidenced by the increasing number of patients in mental hospitals and in the offices of private physicians and psychiatrists. The latest figures are not available, but up to April, 1943, of 2,870,000 men rejected by the Selective Service, the largest single group—some 400,000 men—were rejected for psychiatric reasons. From December 7, 1941, to May, 1944, the Army alone rejected 1,340,000 for neuropsychiatric causes and discharged 216,000. Those figures would have been even higher if men in the Army neuropsychiatric wards had been included. Rejections in this war were considerably higher; hence the discharge rate has been lower than in World War I. Even so, by February, 1944, an estimated 300,000 men were discharged from the services for neuropsychiatric reasons, and this number was then increasing by about 30,000 per month. This figure was 45 per cent, or nearly half of the total dischargees.

It should be emphasized here that most of the men returning from the armed forces will be more mature, clear-eyed, straight-thinking, and hard-headed. The war will have *made* men out of the vast majority of them.

The above figures do not mean that all these dischargees were suffering from psychoses or major mental disorders. A relatively small number were. NP cases in the services are predominantly psychoneuroses or minor emotional illnesses. In order of decreasing frequency, those encountered have been anxiety states, conversion hysteria, and reactive depressions. Constitutional psychopaths and mental deficientes make up about the same number as in peace time. For the most part, these discharges simply mean that these persons were so constituted that they were unable to adjust to the rigors and the strict regimentation of military life, and merit no shame. Every person will break under sufficient stress. Many of our finest and most useful men in industry and in professional life have psychoneurotic traits. Most of these dischargees will be useful and productive citizens when returned to civil life. Of course, some few psychotics will require hospitalization. Arrangements are being made by the Veterans Administration with The Queen's Hospital for treatment

Read before the Annual Meeting of the Hawaii Territorial Medical Association, Honolulu, May 4, 1945.

of some of these veterans there by private psychiatrists. This is in addition to contracts already existing with the Territorial Hospital. A regional adjudication bureau here is contemplated in order to expedite handling of all patients. Severe psychoneurotics will require help from families and physicians to remove their anxieties and conflicts, and from employers as well to place them properly in industry. Psychopaths and other maladjusted individuals will need special help to fit them into the community.

The need for assistance to veterans is evident to those who have considered the lessons of World War I. Medical care, bonuses, pensions, and special privileges are not enough. It is necessary in addition to inspire men with a will-to-do and to help them back to normal channels in civilian life as quickly as possible. Prompt employment in suitable and emotionally satisfying occupations is one of the greatest aids which can be extended to all veterans, including NP discharges. The GI Bill of Rights provides many opportunities. No governmental agency, however, has the responsibility of advising veterans of claims against the government. In many instances, the veteran will not know what he wants nor what is best for him. In Hawaii, a group called Veterans' Advisors—to date free from politics, governmental or veteran—offers assistance and advice to discharges. It attempts through consultants to determine the aptitudes of the individual for specific employment or for further education, to help him get loans or to set up a business, and to advise and assist him in a variety of ways. This is a practical sort of help that veterans should and do appreciate, and it is hoped it will be continued.

Industry need not be apprehensive about employing most NP discharges. As stated previously, the relatively few psychotics will be cared for by hospitalization, and will not come seeking

employment until well. This situation is no different from that in peace time. Employers should be advised that, for all practical purposes, an NP discharge per se means nothing, and they should be encouraged to accept such persons for employment without any qualms whatsoever. Employment interviews by employment personnel, in some instances by physicians and occasionally by psychiatrists, should be carried out routinely. A previously satisfactory employment record, an aptitude for and an interest in the job under consideration should weigh much more in employing a man than his service record, which will probably not be available anyhow. Most of those discharged for NP reasons will be useful and productive employees if some thought is given to the type of work they are required to do. It has already been demonstrated, in studies of employed NP discharges, that many of the psychoneurotics had the best work records in the group. This fact must be impressed on physicians, business executives, employers, and the general public alike.

#### SUMMARY

The vast majority of men coming out of the services will be more mature and better able to adjust than before they went in.

Many men will be discharged from the armed forces for NP reasons.

Such discharge in most instances simply means inability to adjust under the rigors and regimented conditions of military service, and merits no shame.

Most of these men will do well when employed at jobs for which they have liking and aptitudes.

Employers should be encouraged to employ such discharges without qualms.

RICHARD DEMONBRUN KEPNER, M.D.



# NOTES AND NEWS

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## PERSONALS

DR. MORTON BERK completed his residency in medicine at Queen's Hospital on November 15 and joined the Department of Medicine in the Medical Group on Punchbowl Street, Honolulu.

Many of the physicians from Hawaii who served so well in the armed services are now returning to their civilian practices. MAJOR LESTER F. YEE passed through Honolulu on his way back to Boston after serving as chief of orthopedic service and surgery at the 105th General Hospital on Leyte. DR. DONALD DEPP, who was on the staff of the Waipahu Plantation Hospital before entering the army in 1942, has been appointed resident physician at Koloa Hospital on Kauai. DR. C. W. TREXLER, DR. JOSEPH PALMA, DR. OGDEN D. PINKERTON and DR. ROBERT D. MILLARD have all returned from active military service to resume practice here. DR. ROBERT FAUS has returned recently from Ie Shima to don civilian clothes. DR. LESLIE VASCONCELLES has returned and taken a residency at St. Francis Hospital. DRS. GILES, CHUNG-HOON, CHUN-MING, BAILEY, LUKE, and ITO are back.

DR. HARUTO OKADA of Honokaa has been appointed government physician for the South Kohala district on Hawaii, replacing DR. EVELYN ROSS. DR. ROSS served as interim medical resident at Queen's Hospital pending a mainland residency.

DR. MARTHA COOK WAGER is the new pediatrician in the bureau of maternal and child health of the Board of Health. DR. WAGER has served with the New York Hospital since 1940 as assistant pediatrician to out-patients and as instructor in pediatrics at Cornell University medical college since 1942. Her work at the Board of Health will include conducting child health conferences, and assisting in pediatric research and the health services of the schools in Honolulu.

DR. P. H. LILJESTRAND was elected president of the Territorial Association of Plantation Physicians at their meeting in November. DR. WILLIAM BALFOUR of Wailuku was selected for the vice-presidency, and DR. M. A. BRENNECKE of Waimea as secretary-treasurer.

Back to Honolulu homes after medical work in internment camps and hospitals in Shanghai and

Peking came DR. E. Y. KAU and DR. JEN FONG MOO of Kaimuki. Both doctors went to Shanghai after graduation from medical school, DR. KAU as a missionary physician and DR. MOO to teach in Peking University.

DR. SUMNER PRICE, Medical Director at The Queen's Hospital, clipped to the mainland December 1 for a six week trip there, including attendance at the American Medical Association convention as an alternate delegate from Hawaii.

DR. AND MRS. GUY MILNOR, DR. AND MRS. FRED LAM and DR. AND MRS. JOSEPH STRODE have all returned recently from vacations in the states.

LT. COL. JOHN A. BURDEN, Maui physician serving with the army in China, has been awarded the Legion of Merit by Lt. Gen. Wedemeyer. The Colonel has already been awarded the Silver Star, the Bronze Star and the Purple Heart.

DR. PHILIP CORBOY and DR. PERRY SUMIDA have announced the opening of practices limited to ophthalmology. DR. RICHARD T. KAINUMA has opened his office for the practice of medicine and surgery in Honolulu, and DR. SAM TASHIMA entered practice in Wahiawa, Oahu.

DR. WALTER K. HOFFMAN and DR. WILLIAM B. SIMPSON, both of the University of Tennessee, joined the interne staff at The Queen's Hospital on January 15.

## NEWS

### Squibb Releases Vitamin Formula for Deficiency Disease Therapy

A new product, designed especially for the treatment of sick patients suffering from mixed vitamin deficiencies, has been released by Squibb under the name of Therapeutic Formula Vitamin Capsules. Based on the fact that the therapy of mixed vitamin deficiencies can be met neither by the use of current *maintenance* multivitamin preparations, nor by any simple multiplication of the dosage of such preparations, Therapeutic Formula Vitamin Capsules present potencies of *therapeutic* magnitude of all the vitamins, lack of which has been shown to cause deficiency states commonly occurring in man.

The formula, which was developed in the light of the latest clinical findings and which har-

monizes with the views of recognized leaders in the field of nutritional therapy, provides in each capsule: vitamin A, 25,000 units; vitamin D, 1,000 units; thiamine hydrochloride, 5 mg.; riboflavin, 5 mg.; niacinamide, 150 mg.; ascorbic acid,

150 mg. In the average case of moderate mixed vitamin deficiency, one capsule daily provides the minimum therapeutic dose; in severe cases, two capsules. Therapeutic Formula Vitamin Capsules are available in bottles of 100.

## DR. MILTON RICE

1864-1945

Dr. Milton Rice died at his home in Hilo, Hawaii, on September 19, 1945. Dr. Rice was 81 years of age at the time of his death and was the oldest physician in the active practice of medicine in the Territory. He was licensed to practice medicine in the Territory in 1899. It is believed that this license antedates that of any living physician in the Territory.

Dr. Rice was born in Washington County, Wisconsin, February 24, 1864, the son of the late Philip and Elizabeth (Gross) Rice. After attending secondary schools in Wisconsin and Iowa he attended Hahnemann and Hering Medical Colleges and received the M.D. degree in 1895. From graduation to 1899 Dr. Rice practiced his profession in Cedar Rapids, Iowa. He then came to Hilo, Hawaii, and entered practice, remaining here until 1905, when he went to Milwaukee, Wisconsin, remaining there for eight years. During two years of this interval Dr. Rice was surgeon for the Chicago, Milwaukee and St. Paul Railroad and in 1912-1913 he was a member of the Medical Examining Board of the state of Wisconsin. In 1913 he returned to Hilo, where he remained until his death.

Dr. Rice was County Physician for the Island of Hawaii for over 10 years. For about 30 years he confined his practice to diseases of the eye, ear, nose and throat. He was a member of the American Institute of Homeopathy.

Dr. Rice married Laura Cone in June, 1885, in Marion, Iowa. They had four children, three of whom survive their father: a daughter, Mrs. Mildred Huff, of Hilo, and two sons, Robert Rice of Honolulu and Paul Rice of Milwaukee, Wisconsin.

Dr. Rice was a man of strong convictions and had very definite ideas which he did not hesitate to promote for the betterment of this community. Consequently he was a member of numerous civic organizations.

He was at various times vice-president, president and manager of the Hilo Chamber of Commerce, and it was largely through his efforts that the Associated Chamber of Commerce of Hawaii was organized, with Dr. Rice serving as the first president. He also served as president of the Hawaii County Fair Association, president and trustee of the Hoolulu Park Association, and president and member of the board of trustees of the Hawaii County Library since 1916. For years he was in the forefront sponsoring legislation for improvements and expansion of the Hawaii County Library. These efforts culminated in the appropriation by the last Territorial Legislature of funds for a new library, to be erected on a site previously purchased for this purpose.

Dr. Rice had an alert and active mind up to the last. He had a real sense of humor. A little over six years ago, when the writer came to the Island of Hawaii as physician for the Olaa Sugar Company, Dr. Rice greeted him with this story. "In 1899 Olaa Sugar Company had no regular physician but frequently called me to see an injured patient there. I remember being called to see a Japanese man whom I found with a broken forearm. He had climbed a tree, sat on a limb, and sawed the limb off between himself and the tree trunk. I have heard the expression many times but this man literally sawed off the limb he was sitting on." A year ago the writer was at Kona Inn when in walked Dr. Rice, his plentiful grey hair smoothly combed, walking as erect as a young athlete, his body lean and lithe. During dinner he stated that he was 80 a few days before and he had driven his car to Kona that day, had seen several patients and was returning 120 miles to Hilo the following day.

It can be said that he gave his best for his community during a long and useful life.

H. M. PATTERSON, M.D.

### Mississippi Valley Medical Society 1946 Essay Contest

The Mississippi Valley Medical Society is resuming its annual Essay Contest which has not been held during the war. In 1946 it offers a cash prize of \$100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society to be held at St. Louis, Mo., September 25, 26, 27, 1946, the Society reserving the exclusive right to first publish the essay in its official publication—the *Mississippi Valley Medical Journal* (incorporating the *Radio-logic Review*). All contributions shall not exceed 5,000 words, be typewritten in English in manu-

script form, submitted in five copies and must be received not later than May 1, 1946.

Further details may be secured from  
Harold Swanberg, M.D., Secretary,  
Mississippi Valley Medical Society,  
209-224 W.C.U. Building, Quincy, Illinois.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, OF HAWAII MEDICAL JOURNAL published bi-monthly at Honolulu, Hawaii, for October 1, 1945.

Territory of Hawaii } ss.  
County of Honolulu }

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Harry L. Arnold, Jr., M.D., who, having been duly sworn according to law, deposes and says that he is the Editor of the HAWAII MEDICAL JOURNAL and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor and managing editor are:

Publisher: Hawaii Territorial Medical Association, Mabel Smyth Bldg., Honolulu 53, Hawaii; Editor: Harry L. Arnold, Jr., M.D., Mabel Smyth Bldg., Honolulu 53, Hawaii; Managing Editor: Mrs. Edith C. Bennett, Mabel Smyth Bldg., Honolulu 53, Hawaii.

2. That the owner is: Hawaii Territorial Medical Association, Mabel Smyth Bldg., Honolulu 53, Hawaii.

HARRY L. ARNOLD, JR.

Sworn to and subscribed before me this 12th day of October, 1945.

L. B. REEVES, Notary Public.

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# INTER-ISLAND NURSES' BULLETIN

*Official Publication of the Nurses' Association, Territory of Hawaii*

ALICE A. SCOTT, R.N., *Bulletin Chairman*  
ETHEL H. BROWN, R.N., *Executive Secretary*

## *Bulletin Committee*

VIRGINIA M. DOYLE, R.N.  
EVA E. PEYTON, R.N.  
ERMA BURGESS, R.N.  
HELEN GAGE, R.N.

## *Island Reporters*

HAWAII: THELMA M. PATTEN, R.N.  
MAUI: BETSY BOYLIN, R.N.  
KAUAI: THELMA HENSLEY, R.N.

## REPORT OF THE EXECUTIVE SECRETARY

The Hawaii Medical Service Association plans are being studied in hope that pre-payment plans for health service may be made available to every member of the Territorial Nurses' Association. More information on this plan will soon reach the County Associations.

ALBERTINE SINCLAIR, chairman of the Board of Registration of Nursing, reports that the Board now lacks two members. VIRGINIA JONES is on leave serving under the American Red Cross in Manila. MARGERY MACLACHLAN has left the Territory. Recommendations for a member to fill MISS MACLACHLAN's place were made by the Board of Directors of the Nurses' Association, Territory of Hawaii, at their meeting November 27, and have been sent to Governor Stainback.

The new Nurse Practice Act was passed in the last legislature. The Board is now setting up machinery to put this act into effect. It will be necessary to set up standards for nursing schools and standards for the licensing of practical nurses. The definition of a registered nurse and a practical nurse according to the new Act are as follows:

"Section 2770. *Definitions.* A person practices nursing within the meaning of this chapter who for compensation (a) performs any service requiring the application of principles of the biological, physical and social sciences in the attendance on and care of a sick, invalid, or disabled human being hereinafter called 'patient,' such as responsible supervision of a patient, requiring skill in observation of symptoms and reactions and the accurate recording of the facts, and carrying out of treatments and medications as prescribed by a licensed physician, and the applications of such procedures in such attendance and care as involve understanding of cause and effect of disease and treatment in order to safeguard life and health of a patient and others, which shall constitute 'the theory and practice of nursing' as used in this chapter; or (b) performs such duties as are

required in the physical care of a patient and in carrying out of medical orders as prescribed by a licensed physician, requiring an understanding of methods of easing and caring for the patient, but not requiring the scientific understanding and trained skill outlined in (a), which shall constitute 'practical nursing' within the meaning of this chapter."

We have reported to the American Nurses' Association by radiogram our availability for counselling and placement of Army nurse veterans.

THELMA M. AKANA has been appointed the Territorial Consultant Member of the Advisory Committee of the American Nurses' Memorial Nightingale School of Nursing, Bordeaux, France.

The Territorial Nurses' Association has applied to Procurement and Assignment Service for Nurses of the Federal Security Agency that all record material belonging to Procurement and Assignment Service for nurses be turned over to the Territorial Nurses' Association.

A committee on Nursing Service has been appointed by the Board of Trustees of the Territorial Nurses' Association for the Postwar Planning Committee of the Public Health Committee of the Chamber of Commerce of Honolulu. The report from this committee has been submitted and is awaiting review by the Steering Group. This same committee will act as the Nursing Council for the Nurses' Association, Territory of Hawaii. Its membership represents the National League of Nursing Education, the National Organization for Public Health Nursing, the Nursing Committee, Hawaii Chapter, American Red Cross, the Board of Registration of Nursing, Territory of Hawaii, the Board of Directors, Nurses' Association, Territory of Hawaii, and an Industrial Nurse. Subcommittees on: Wages, Hours and Personnel



Policies and on Pre-payment Plans for Health Service will be appointed by this committee.

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A letter was sent to Mr. Fred Kanne, Collector of Internal Revenue, enclosing a copy of an article which appeared in "Trained Nurse and Hospital Review." Mr. Kanne was asked to inform all of his personnel of the authority to permit nurses a deduction against Federal income tax for the cost of their white uniforms, caps, shoes, stockings and the upkeep of these items, including laundry.

\*\*\*

A fine tribute was paid nurses by Mrs. Eleanor Roosevelt in her newspaper column dated October 4, 1945. At the suggestion of the American Nurses' Association the Executive Secretary has written to Mrs. Roosevelt expressing our appreciation and our particular pleasure that two of our own members had the privilege of discussing the nursing situation in Hawaii at the time of her visit here.

\*\*\*

The dates of the annual meeting of the Territorial Nurses' Association are March 21 and 22, 1946. The theme will be: "Any Lasting Reform in Nursing Must Be Made by Nurses."

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#### REPORT OF DIRECTOR OF THE NURSING SERVICE BUREAU

The last permanent Director of the Nursing Service Bureau left in March of 1941. From that time the full responsibility of the Bureau was carried by MARIE H. CARTER through most of the war period. The OCD, in bringing down the American Red Cross nurses for their hospitals, used the facilities of the Nursing Service Bureau. We all wonder how MRS. CARTER carried on such a super-human task, with only one regular staff member and occasional relief by individual nurses.

Following the appointment of ETHEL HENSLEY BROWN as permanent Director, in June of 1945, the Nursing Service Bureau launched an intensive recruitment campaign early in July in an effort to relieve the acute nurse shortage throughout the Territory. Radio Station KGMB donated a one-minute news flash on the *Hawaii Calls* program which was broadcast by 400 major stations on the mainland. Acting Governor Gerald Corbett issued an appeal which appeared in newspapers throughout the continental United States. The Nursing Service Bureau placed advertisements in the American Journal of Nursing and display ads in three leading west coast newspapers. In response to this publicity hundreds of letters

have been received. Nurses have been recruited from all sections of the mainland and have been placed in positions on every island in the Territory. Despite difficulties of transportation and priority, a total of 95 nurses arrived during a three month period from August to November, 1945.

The Nursing Service Bureau is being recognized as the official headquarters of the entire nursing profession. The Hospital Council of Honolulu and the Plantation Hospital Association have recommended that the Bureau be the official recruitment center for hospitals. The Director has explained the services of the Bureau to hospitals, industrial organizations, the H.S.P.A., the American Red Cross, the United States Employment Service, Civil Service Commission, Chamber of Commerce, private physicians, and other private and civic organizations, who are referring applications for placement more and more to the Nursing Service Bureau. There has been a marked increase in counselling work with nurses.

\*\*\*

A report was made to the American Red Cross national headquarters regarding nursing conditions in Hawaii, relative to opportunities of future service for the nurse veteran. A letter was sent to the Chief Army nurse and the Chief Navy nurse in this area to be sent forward in hope that some nurses in service may want to remain here.

\*\*\*

A short history of the Nursing Service Bureau and review of nursing in Hawaii during the war was sent to the American Journal of Nursing. Some of this report appeared in the November issue.

\*\*\*

The new Director of the Bureau is a member of the Hospital Council, the Post War Planning Committee on Health of the Chamber of Commerce, chairman of the Publicity Committee of the Territorial Nurses' Association, and is a member of the Zonta and the Business and Professional Women's clubs.

\*\*\*

One of the first projects attempted by the new Director was securing financial aid in supporting the Nursing Service Bureau. Organizations approached for assistance were the Chamber of Commerce Public Health Committee, the Community Chest, the office of the Governor and the Honolulu County Medical Society. The Medical Society contributed \$1,000 toward the support of the Bureau. THELMA M. AKANA has been appointed chairman of a special committee to raise funds elsewhere.



The following are excerpts from the financial and statistical reports of the Nursing Service Bureau for October, 1945:

Income .....	\$ 507.63
Expenses .....	\$1,942.60
Nurses recruited from the mainland .....	21
Position placements: institutional, office, industrial .....	32
Active private duty members .....	62
Calls for private duty nurses .....	215
Calls filled for private duty nurses .....	156
Office interviews and consultations .....	42

### NEWCOMERS

June 1 to November 30, 1945

NAME	FROM	FOR
ANDERSON, PHYLLIS	Spokane, Wash.	Shriner's Hospital
ANGUS, RAMONA	Washougal, Wash.	Kohala, Hawaii
BANNON, LORETTA	Providence, R. I.	Children's Hospital
BARNES, ELSIE	Cedar Rapids, Iowa	Children's Hospital
BEAVER, HELEN	Los Angeles, Calif.	St. Francis Hospital
BERKE, DORIS	Portland, Ore.	Queen's Hospital
BRUCKNER, MARGARET	Lubbock, Texas	Queen's Hospital
BUDRES, MARY J.	Canal Zone	Kuakini Hospital
BUTLER, CATHERINE	Los Angeles, Calif.	Kapiolani Hospital
COLE, VIRGINIA	Omaha, Nebr.	Kapiolani Hospital
CRAIN, BRENDA	Coffeyville, Kan.	St. Francis Hospital
CRUTE, SARA L.	Alexander, Va.	Waipahu Hospital, Oahu
DOCKERY, MILDRED	Temple, Texas	Kapiolani Hospital
EVANS, EVELYN	San Mateo, Calif.	Queen's Hospital
FITZPATRICK, SALLY	Vashon, Wash.	Queen's Hospital
FRANCISCO, GLADYS	Amberg, Wisc.	Kapiolani Hospital
GARBER, FRANCES	Huntington Park, Calif.	Kohala, Hawaii
GRIGNON, LUCILLE	Duluth, Minn.	St. Francis Hospital
HARDING, GERALDINE	Dallas, Texas	Queen's Hospital
HARLE, MARIAN E.	Ferndale, Calif.	Queen's Hospital
HART, DOROTHY	Upper Darby, Penn.	Queen's Hospital
HENRY, DOROTHY	New York City	St. Francis Hospital
HINSON, LURA	Fort Worth, Texas	Queen's Hospital
HOULETTE, MARGARET	Clovis, New Mexico	Kapiolani Hospital
HOULT, ELSIE	Palo Alto, Calif.	Malulani Hospital, Maui
HUGHES, ELIZABETH	Muncie, Indiana	Kuakini Hospital
HUGO, MARY	New York City	Kuakini Hospital
IRVINE, ROBERTA	Ames, Iowa	Waimea Hospital, Kauai
JACOT, RUTH A.	Long Beach, Calif.	Children's Hospital
KAUTSKY, HILDE A.	New Haven, Conn.	Queen's Hospital
KINGSLEY, HAZEL	Long Beach, Calif.	Wahiawa Hospital, Oahu
KINNEY, FRANCES	San Francisco, Calif.	Kalaupapa Hospital, Molokai
KISTLER, JEAN A.	Elkhart, Indiana	Laupahoehoe, Hawaii
LANGF, INFZ M.	Minneapolis, Minn.	St. Francis Hospital
LEE, NINA	Minneapolis, Minn.	Children's Hospital
LETO, JOSEPHINE	Oakland, Calif.	Kapiolani Hospital
MARTIN, MARIAN	Madison, N. C.	Queen's Hospital
MEDLIN, HELEN	Palo Alto, Calif.	Malulani Hospital, Maui
MINTON, LOUISE	Independence, Mo.	Queen's Hospital
MORRISON, MARGARET	Columbus, Montana	Children's Hospital
NELSON, MARGARET	Winthrop, Minn.	Queen's Hospital
NICKEL, EDNA	Ouray, Colorado	Queen's Hospital
NICKEL, ELSIE	Ouray, Colorado	Queen's Hospital
POUND, BARBARA J.	Colfax, Nebraska	Children's Hospital
PRUCE, MARTHA	Sheaton, Illinois	Queen's Hospital
RANKIN, MARY HILL	West Palm Beach, Fla.	Kuakini Hospital
RASMUSSEN, JEANNE	Omaha, Nebraska	Children's Hospital
RIDGWAY, JEANNE	Seattle, Wash.	Lanai City Hospital
ROSELLE, ZELDA	Temple, Texas	Kapiolani Hospital
SIMMS, JANEY	Dallas, Texas	Kapiolani Hospital
SHEPHERD, MARY J.	Denver, Colorado	Olaa Hospital, Hawaii
SIMON, DOROTHY	Billings, Montana	Children's Hospital
SKOOG, MYRTLE	Mankato, Minn.	Leahi Hospital
SMALLWOOD, ANNE	New York City	Queen's Hospital
SORENSEN, NELLE	Alhambra, Calif.	Kalaupapa Hospital, Molokai
STINSON, SHIRLEY	Glenwood, Minn.	Queen's Hospital
TIMMERMAN, BEULAH	Springfield, Mass.	Queen's Hospital
THOMPSON, JULIA	San Francisco, Calif.	Kapiolani Hospital
TOKUNAGA, DAISY	Philadelphia, Penn.	Children's Hospital
VELTE, MARY	Lexington, Nebraska	Kapiolani Hospital
VON DOHREN, ROSE	Los Angeles, Calif.	Kona Hospital, Hawaii
WALSH, AILEEN	New York City	Wilcox Hospital, Kauai
WEAVER, NELLIE	Hoytville, Ohio	Children's Hospital
WEBBER, DOROTHY	Fergus Falls, Minn.	Queen's Hospital
WEST, ANN O.	Monterey, Calif.	Children's Hospital
WESTERMAN, JOSEPHINE	Honolulu	Puumaile Hospital, Hawaii
WHITTINGTON, MARGUERITE	Cincinnati, Ohio	Children's Hospital
WILSON, DORIS C.	San Francisco, Calif.	Children's Hospital
WINGETT, RUTH	Independence, Mo.	Queen's Hospital
YAGGER, BETTY J.	Philadelphia, Penn.	Kapiolani Hospital
YATES, MARY JANE	Walla Walla, Wash.	Kapiolani Hospital
McKINNEY, HUGH J.	Fort Worth, Texas	Queen's Hospital

### HONOLULU CITY AND COUNTY ASSOCIATION

Regular meetings of the Association are held at the Mabel Smyth Building on the first Monday of every month. Throughout the war meetings were held at 4:15 p.m., but beginning December 3, evening meetings were resumed. A "share the ride" plan has been put into effect, so that no nurse need ride the bus home after meetings.

It has been found that maintaining a file for members by both the secretary and treasurer has not made for accuracy, so these files have been consolidated and are kept in the Association office at the Mabel Smyth Building.

A mimeograph machine has been rented by the Association to make the work of the secretary a little less difficult.

A hostess from each hospital and from the Public Health Nursing staff is appointed at each meeting to invite nurses recently arrived in the Territory to attend the meetings.

The senior classes of each nursing school are being invited to come to meetings. They will soon be active members of the Association and we hope to arouse their enthusiasm to take an active part in Association matters.

Sponsors are appointed to invite and bring to her first meeting each new member.

The Association has a new and very active Industrial Section. A report of their meetings, aims and activities was given by the Chairman at the October meeting. This Section is planning to join the National American Industrial Association. During 1945 the Section has heard the following speakers: Dr. Finnegan on "Nursing in Industry," Comdr. C. M. Hutchins on "Psychology and Rehabilitation in Post War Employment," Dr. Porteus on "Psychology of Primitive People," Dr. H. F. Moffat on "Prevention and Care of Industrial Injuries of the Eye," Lt. Comdr. H. E. Hinman on "Experiences as a Flight Evacuation Officer," and Dr. R. B. Cloward on "First Aid Treatment of Head Injuries."

The Private Duty Section has not had regular meetings since the beginning of the war, as most of them have been working 12 hours, which leaves little time for meetings. Special meetings have been held from time to time.

The following information has been obtained by Albertine Sinclair, Chairman of the Revision Committee of the Nurses' Association, City and County of Honolulu, in answer to inquiries made about associate membership:

"Associate membership is not provided for in the by-laws of the American Nurses' Association, nor is this form of membership recommended for a state or district nurses' association.

"Surely the interest of a nurse in her profession and her contribution to the nursing organization need not be dependent upon active practice in the field of nursing. Probably we all know so-called 'inactive' nurses who have made extremely valuable contributions to the professional nursing association. In many instances these nurses have been able to give so much largely because of their freedom from the responsibilities of employment. It would be unfortunate to lose the interest and support of these nurses as fully participating members of the association. Also, it seems to me that any nurse who assumes her full share of responsibility as a member of the professional membership association of nurses, gains as much from her participation as she gives." Signed: MARY E. STEBBINS, R.N., Chairman ANA Committee on Constitutions and By-Laws.

\*\*\*

The premiere of "Student Nurses" was held in the auditorium of the Mabel Smyth Building on November 29, 1945. This technicolor sound movie shows a student nurse from The Queen's Hospital during her year at the University of Hawaii, and her three years at the hospital, including her affiliating experience. The photography and script writing were done in Honolulu. The sound track was added in Hollywood. This film is to be used in the recruitment program for student nurses and will be shown throughout the Territory.

#### Personals

MR. AND MRS. FRANK O'CONNELL announce the birth of a daughter, Patricia Lynn, on September 23, 1945. MRS. O'CONNELL is the former MAVIS MCKAY.

\*\*\*

KATHERINE QUON was married to DR. CLIFFORD KOBAYASHI on October 13, 1945, at St. Andrew's Cathedral.

\*\*\*

BERNICE HAYASHIDA is the new Director of Nurses at Kuakini Hospital. Mrs. Hayashida is a Queen's Hospital graduate of the class of 1935.

\*\*\*

Two new nursing supervisors have arrived on the staff of St. Francis Hospital. SISTER MARY ANYSIA, a graduate of St. James' Hospital, Newark, N. J., will supervise the surgical floor. SISTER MARY WILMA, a graduate of St. Joseph's Hospi-

tal, Syracuse, N. Y., will be the operating room supervisor.

\*\*\*

MARGERY MACLACHLAN, who has been Director of the nursing service and school of nursing at The Queen's Hospital since July 1, 1944, has returned to the mainland. MILDRED MCFERREN has replaced her at Queen's. She comes from a similar position at Sewickley Valley Hospital, Sewickley, Pennsylvania. MISS MCFERREN received her B.S. and M.A. in Nursing Education at the University of Pennsylvania. She has completed all of her required advanced theoretical work toward her Ph.D.

\*\*\*

JANICE MICKEY arrived recently to join the Bureau of Public Health Nursing, Territorial Board of Health, as assistant Educational Director. Miss MICKEY's home is in Lincoln, Nebraska. She graduated from Stanford University School of Nursing, taking her B.S. at the University of Nebraska, and her M.S. in Preventive Medicine and Public Health Nursing at the University of Minnesota.

\*\*\*

PATIENCE CLARKE has recently returned from the mainland to develop a program of tuberculosis nursing education at Leahi Hospital. This program will be an affiliation for local schools of nursing and will also offer post-graduate courses in tuberculosis nursing. The Tuberculosis Association of the Territory of Hawaii is financing this program during its development.

\*\*\*

THELMA WILLIAMS, one of the first nurses to come to Hawaii with the Red Cross Overseas Unit, left Honolulu in April, 1943, for China, where she had previously served in the Southern Baptist Mission. On her way there she suffered an accident on the Burma Road, but managed to teach nursing to missionaries and East Indian students in Burma from her hospital bed.

\*\*\*

From the *Nursing News Bulletin*, American National Red Cross Nursing Service: "MISS VIRGINIA A. JONES (Reid Memorial Hospital, Indiana) is on six months' leave of absence from the faculty of the University of Hawaii to serve as American Red Cross nursing advisor to the Philippine Red Cross. Her long experience in the field of public health nursing and her recent experience in the various nursing service programs in the Hawaii Chapter prepare her admirably for the tremendous task of assisting the Philippine Red Cross to develop Nursing Service programs. She arrived in Manila on August 30, 1945."



**HAWAII COUNTY ASSOCIATION**

HELEN MULLER and PATRICIA MCKIM of Laupahoehoe Sugar Co. Hospital will be leaving for the mainland soon. They have been in the islands about four years, having come shortly before the war as staff nurses for Hilo Memorial Hospital. Miss MCKIM returns to New York and Miss Muller to Pennsylvania.

MOIRA WILSON, office nurse for Dr. L. L. Sexton, spent her vacation with Miss Muller and Miss McKim at Kona and Laupahoehoe.

HELEN GORSUCH, who has been surgical nurse at Hilo Memorial Hospital for a number of years, filled her time while waiting for transportation to the coast by working on the staff of Kona Hospital.

DOROTHY MOLL has returned to Hilo after an extended visit with her brother and his family on the mainland.

The Nurses' Association of the County of Hawaii voted a Lifetime Honorary Membership to two of its members this fall. MARGARET CAMPBELL, formerly at Hilo Memorial Hospital laboratory, had retired from active service, but returned to the hospital when the war broke out and helped establish the blood bank, and worked diligently all during the emergency. She is now retired again. JANE SERVICE, who pioneered in Public Health Nursing here, carried on with an enviable record, even when in poor health, until after the war emergency was over and she could be relieved of active duty. Both these nurses were instrumental in organizing the Nurses' Association on Hawaii, and have served the community and the Nurses' Association in an outstanding way. We are proud to have them with our organization.

The Association had another annual White Elephant sale in December to raise our Christmas contributions. These sales create much hilarity, and provide a means of "painless extraction" of shekels from the nurses who attend.

**MAUI COUNTY ASSOCIATION**

The following nurses have joined the staff of the Malulani Hospital:

MARJORIE KENDRICK, formerly science instructor at Evanston General Hospital, Evanston, Illinois.

LORRAINE HIGA, 1945 graduate of St. Francis Hospital, Honolulu.

HELEN MEDLIN and ELSIE HOULT have gone to Palo Alto, California.

EVELYN FARRELL MAPLES, whose husband is with an air group in the Pacific has left Maui.

EVELYN KADOYAMA is on a year's leave of absence.

ROSE LITTEL returned on July 1 from a six months' trip to the mainland.

FRANCES BATES and IRENE BOCHANIYIN, who were employed at Paia Hospital, have returned to the mainland.

**News from Public Health Nursing Staff**

ALICE SCHATTAUER, graduate of General Hospital of Everett, Washington, who was formerly at the Shingle Memorial Hospital and later in the Army Nurse Corps, has taken over the Hana district.

CYNTHIA MAY MABBETTE, who was in the Hana district, left for the mainland in August to attend the D. T. Watson School of Physical Therapy.

LUCILE MARQUEZ, public health nurse on Lanai, resigned October 6 to care for her new baby, Mary Katherine.

BETTY OBERLIES of Dayton, Ohio, graduate of Miami Valley Hospital, Dayton, Ohio, and who had her public health nursing course at the Western Reserve University, has taken over the Haiku district.

GENEVIEVE ANDERSON, who was in the Haiku district prior to July 10, 1945, is now working with the Bureau of Public Health Nursing in Honolulu at the Kapahulu Health Center.

A tuberculosis survey of all adults over 15 years of age was conducted in the Lahaina district. HILDA YATSUSHIRO helped with the survey. NANCY HUSSEY also had a large part in the planning and follow-up.

**KAUAI COUNTY ASSOCIATION**

FLORENCE SPECHT resigned as Superintendent of Nurses at Waimea Hospital in September and returned to the mainland. She came to Kauai in 1942 with the OCD Red Cross Overseas Unit.

LILLIAN MOODIE is now employed as Superintendent of Nurses at Waimea Hospital.



VIOLA HEIDINGER resigned her position with the Board of Health and Kauai Tuberculosis Association in June and returned to the mainland to join her husband who is hospitalized in an Army hospital.

Friends of MARGARET PEPPER will regret hearing of her death September 30, in Alameda, California. Miss PEPPER had given long years of service on Kauai as a plantation nurse, Juvenile Court officer and Head Nurse at the Lihue and Samuel Mahelona Memorial Hospitals, before retiring in September, 1944.

ANNE RUTHERFORD, employed by the Board of Health, returned to the mainland and at last reports was with the Red Cross, nursing poliomyelitis cases in Rockford, Illinois.

MARY JOYCE, who had worked at Huleia, Kilauea, and G. N. Wilcox Memorial Hospital, came through Honolulu recently on her way to the Pacific area as an Army Nurse.

EDITH MOORE, who has been with the Bureau of Public Health Nursing on Kauai since July 1, 1926, retired July 1, 1945. She was well known and liked in her community. She is now living in Honolulu, where she has built a home.

ELSIE HO, Public Health Nurse in the Waimea district, Kauai, for the past year, is taking a leave of absence to go to the mainland for further study.

LILY TOMOMITSU is now on the staff of the Mahelona Hospital.

WILLA SHELL, Public Health Nurse, arrived on Kauai from the mainland November 14, 1945. Miss SHELL is a recent graduate of the University of Cincinnati, with a B.S. in nursing.

MARVELL BYFIELD, Public Health Nurse, Kealia-Hanalei districts, Kauai, is transferring to the Waimea district. Miss BYFIELD was formerly with the OCD Red Cross Overseas Unit.

WINIFRED GOLLEY, Supervisor, Public Health Nursing, Board of Health for the Island of Kauai, transferred to Hawaii on August 1, 1945. She is Supervisor, Public Health Nursing for that island.

DOROTHY TEALL, Supervisor at Kapahulu Health Center, Bureau of Public Health Nursing, Honolulu, transferred to the Island of Kauai. She was appointed Supervisor for Kauai to replace Miss Golley.

NELLIE TAKANO and RUTH IMAI have been appointed to positions on Kauai for the Bureau of Public Health Nursing.

LILLIAN CHONG, a former staff member of the Mahelona Hospital, left Honolulu recently to enter the Philadelphia School of Occupational Therapy.

MITSUYO UDA returned to Kauai in June to become the Dispensary Nurse at the Eleele Hospital.

CATHERINE BELTON left Kauai in October to join the staff of the Wahiawa Hospital, on Oahu.

### RED CROSS NURSING COMMITTEE

The Nursing Committee, Hawaii Chapter, American Red Cross, has only three members left on its Board, since Miss JONES is in Manila and Miss BURNETT and Miss MACLACHLAN have left the Territory.

Annual questionnaires have been sent, and the response has been good, if slow.

Correspondence with the National office has improved, because of the cooperation of the Hawaii Chapter office. Transfers for Red Cross Nurses coming to Hawaii are being received soon after the arrival of the nurse.

A recruitment program to build up the Red Cross nurse enrollment is being planned. Enrollment on the mainland is being temporarily discontinued, in order to study a new program, but the enrollment of graduate nurses in Hawaii is being continued.

VIRGINIA DUNBAR, National Director, Red Cross Nursing Service, has approved the plan of appointing a nurse representative in each of the Chapter branches, who will be provided with information about Red Cross nurses residing in their branch area. This will enable the nurse representative to be of use to the Chapter Branch Disaster, First Aid, and Home Nursing Programs. Each representative will be given a supply of Red Cross Nursing caps and arm insignias for use when she calls nurses on active Red Cross duty.

Many inquiries have been received for information about obtaining new Red Cross pins when the old ones have been lost or broken. The nurse should write to "Director of Nursing Service, American National Red Cross, Washington 13, D.C." and enclose her broken pin, or a statement of its loss, and one dollar, giving her full name and badge number.

### QUEEN'S HOSPITAL ALUMNAE ASSOCIATION

The year 1945 was a very successful year for the Queen's Hospital Alumnae Association. Under the presidency of MARGARET WONG, the organization carried on many activities and accomplished many of the aims set forth at the first of the year.

Two of their chief aims were to sponsor a room in the new wing of The Queen's Hospital and to add to the School of Nursing student loan fund. The alumnae feel that by furnishing a room they will not only be financially supporting their own hospital, but also that a lovely room at The Queen's Hospital will be dedicated to the Alumnae Association as a memorial for many years.

In order to raise funds for these projects the alumnae sponsored a benefit Holoku Ball on August 17, 1945. It was held at Hale Kula, on the hospital grounds, and was a very successful affair. The profit from this dance was turned over to The Queen's Hospital at the annual Alumnae Homecoming Party.

The annual Homecoming Party was celebrated this year at the Harkness Nurses' Home with a buffet luncheon given by the hospital. Many alumnae members attended the party and invitations were sent to the following: the Hospital and Nursing School Board of Directors, the Hospital Administrative Staff, the Nursing Office, and the School of Nursing Faculty members.

Following the luncheon MR. OLSEN served as master of ceremonies and introduced the speakers for the afternoon. MRS. WONG, alumnae president, was introduced first and presented to the hospital, on behalf of the alumnae, a check for \$500 to aid in furnishing a room in the new hospital wing. She also presented to MISS McFERRIN, Queen's new Director of Nursing, a check for \$150, from the association, to be used for the student loan fund.

The other speakers that afternoon were: MRS. HONEYWELL, whose mother, MRS. REBECCA

LAPHAM, was one of the founders of Harkness Nurses' Home; MISS McFERRIN; DR. PRICE, Medical Director of Queen's Hospital; MISS KINNERE, supervisor and nurse at Queen's for 25 years; MRS. GAGE, alumnae advisor; and DR. ALLISON of the School of Nursing Committee.

### ST. FRANCIS HOSPITAL ALUMNAE ASSOCIATION

The Alumnae Association of the St. Francis Hospital has a membership of 92 St. Francis graduates. Meetings are held the third Saturday of each month in the nurses' home at the hospital. The president is HELEN LAMBERT.

A benefit dance was given by the alumnae in May to raise funds for the annual dance given for the graduating class.

Many graduates of the St. Francis School of Nursing were present at the Annual Homecoming, held on the anniversary of the organization of the Alumnae Association.

Three graduates of the St. Francis Hospital School of Nursing have recently left to take post-graduate courses on the mainland. They are VIVIAN PEREIRA, JOSEPHINE BRAZ and FLORENCE KAWABE. MISSES PEREIRA and KAWABE will take advanced work in operating room technique and MISS BRAZ in pediatrics. Another graduate of St. Francis, BETTY NAKAGAWA, has been accepted for a post-graduate course in operating room technique at the Michael Reese Hospital.

JUDITH AKINA is assisting in the new central supply department, until she leaves for the mainland for a post-graduate course in physiotherapy.

MOLLY MATSUOKA is returning to St. Francis Hospital to be in charge of the nursery, after a leave of absence during which she took a post-graduate course in nursery technique at the Chicago Lying-In Hospital.



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Literature on request



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*A Significant Announcement*

*To the Medical Profession:*

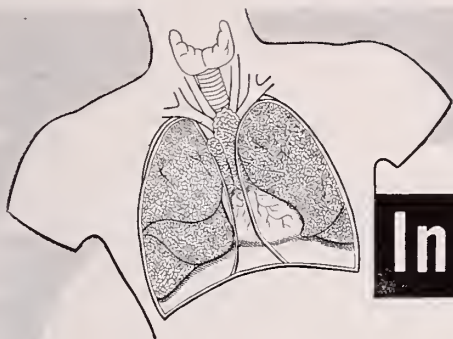
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Since penicillin has become available in quantities that may well be adequate for all needs, it merits being the physician's first thought with every pneumonia patient.

\*Stainsby, W. J.; Foss, H. L., and Drumheller, J. F.: Clinical Experiences with Penicillin, Pennsylvania M. J. 48:119 (Nov.) 1944.

McBryde, A.: Hemolytic Staphylococcus Pneumonia in Early Infancy; Response to Penicillin Therapy, Am. J. Dis. Child. 68:271 (Oct.) 1944.

Stainsby, W. J., Chairman, Commission for the Study of Pneumonia Control of the Medical Society of the State of Pennsylvania: Up-to-Date Facts on Pneumonia, Pennsylvania M. J. 48:266 (Dec.) 1944.

Larsen, N. P.: Observations with Penicillin, Hawaii M. J. 3:272 (July-Aug.) 1944.

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Penicillin-C.S.C. deserves the physician's preference not only in the pneumonias, but whenever penicillin therapy is indicated. Rigid laboratory control in its manufacture, and bacteriologic and biologic assays, safeguard its potency, sterility, nontoxicity, and freedom from pyrogens. The state of purification reached in Penicillin-C.S.C. is indicated by the notably small amount of substance required to present 100,000 Oxford Units. Because of this purity, incidence of the undesirable reactions, attributed by many investigators to inadequate purification, is greatly reduced.

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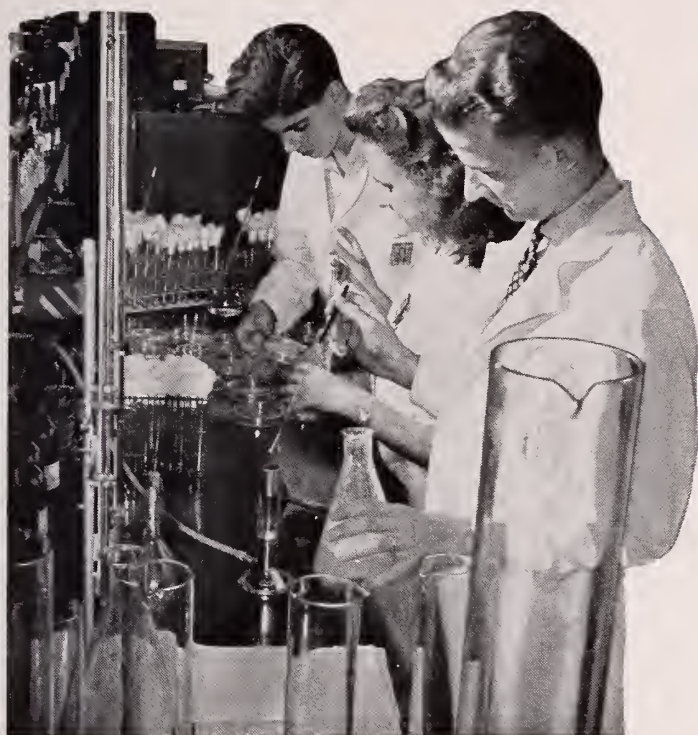
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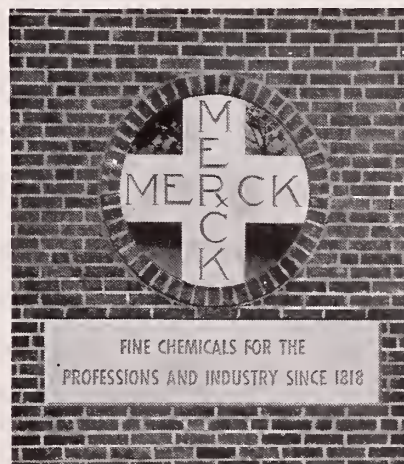
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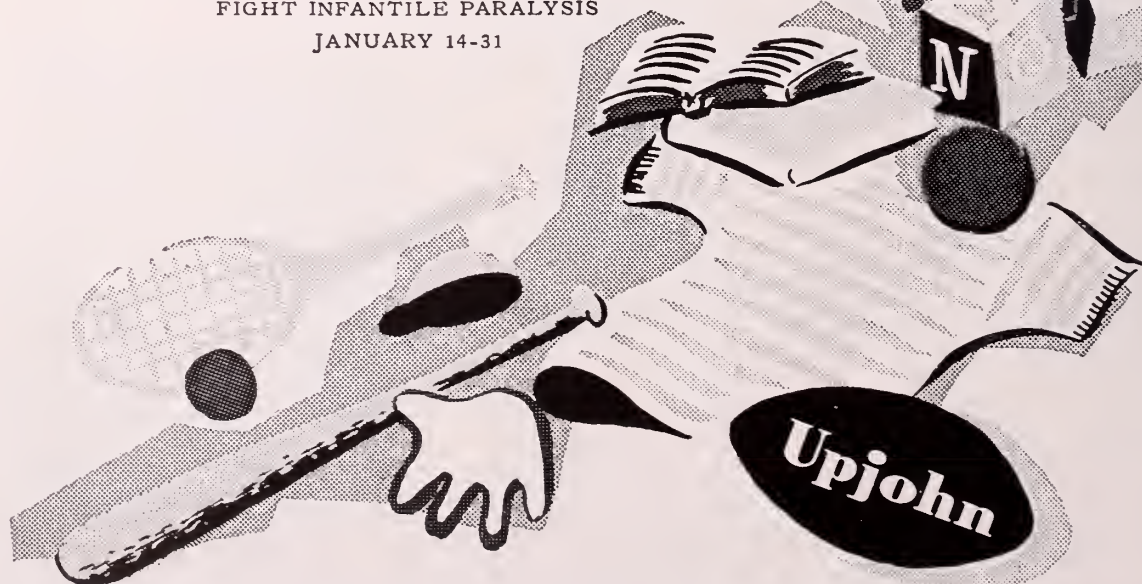
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1. Am. J. Dis. Child. 66:1 (July) 1943.

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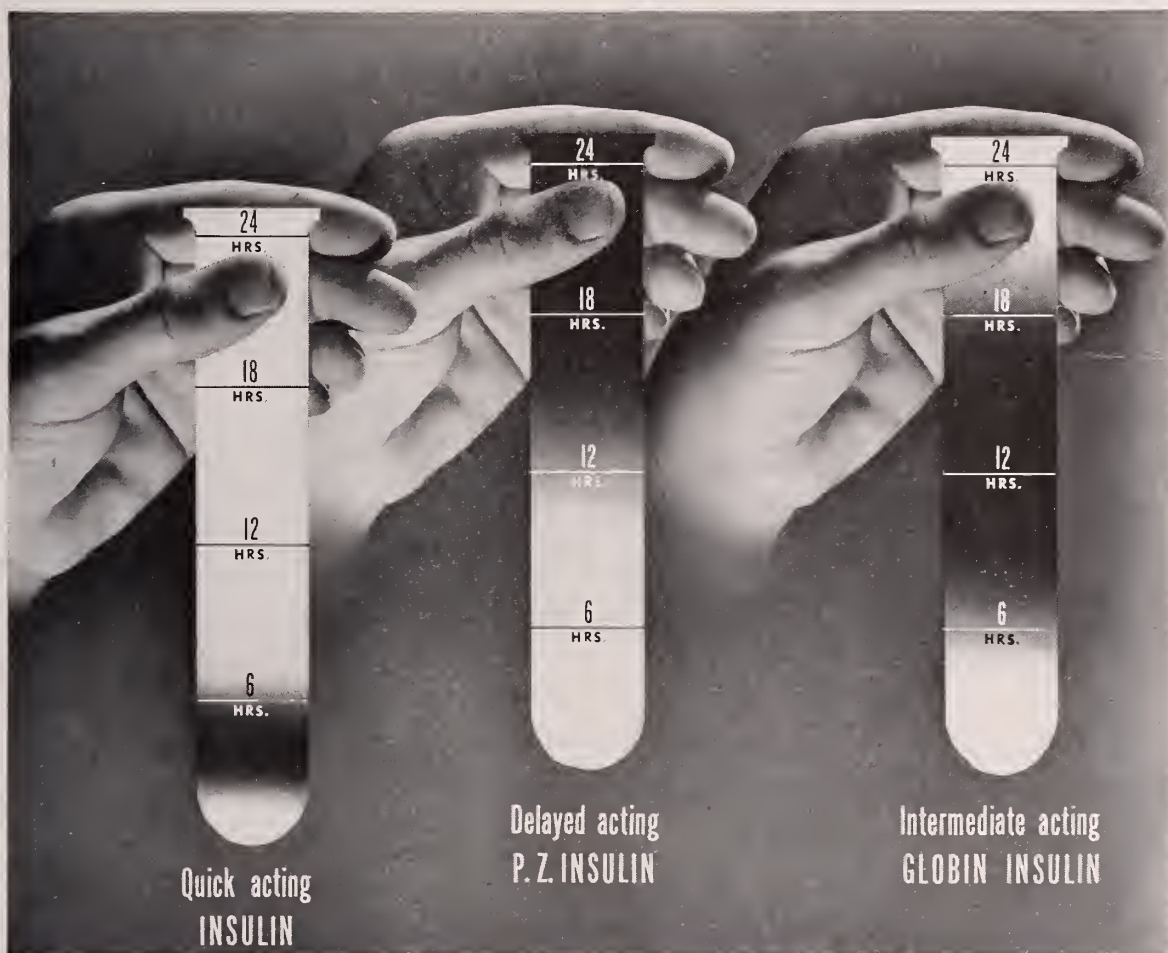
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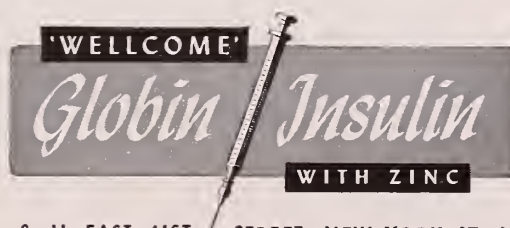


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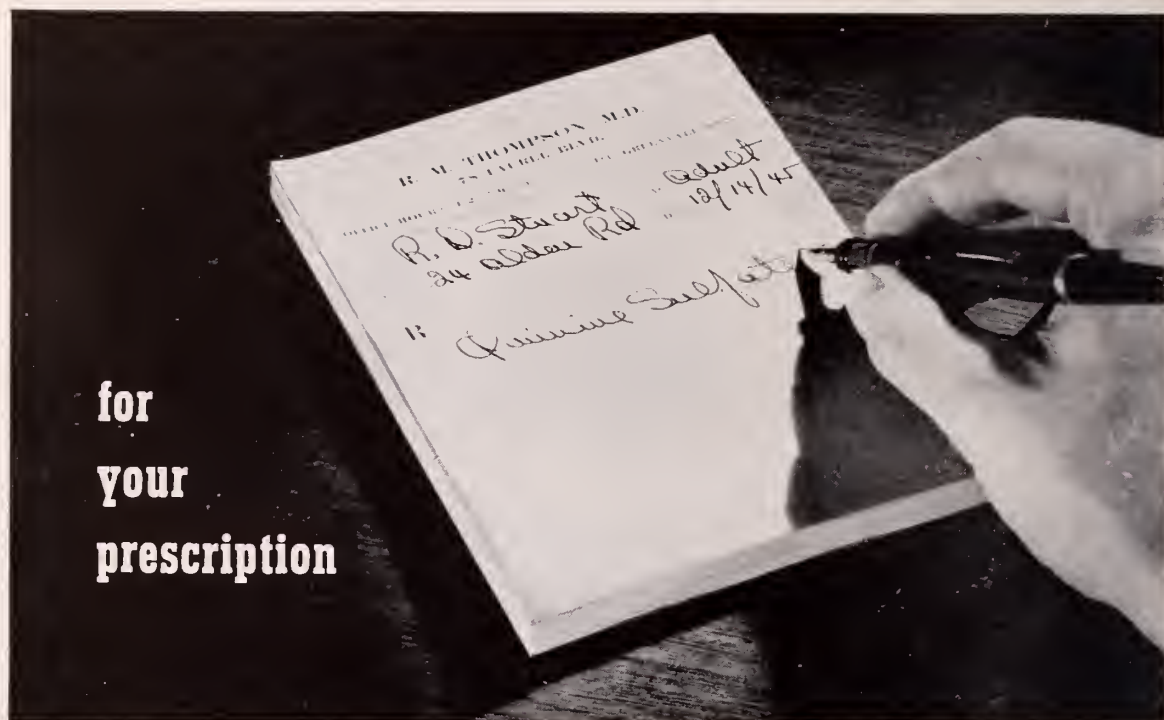
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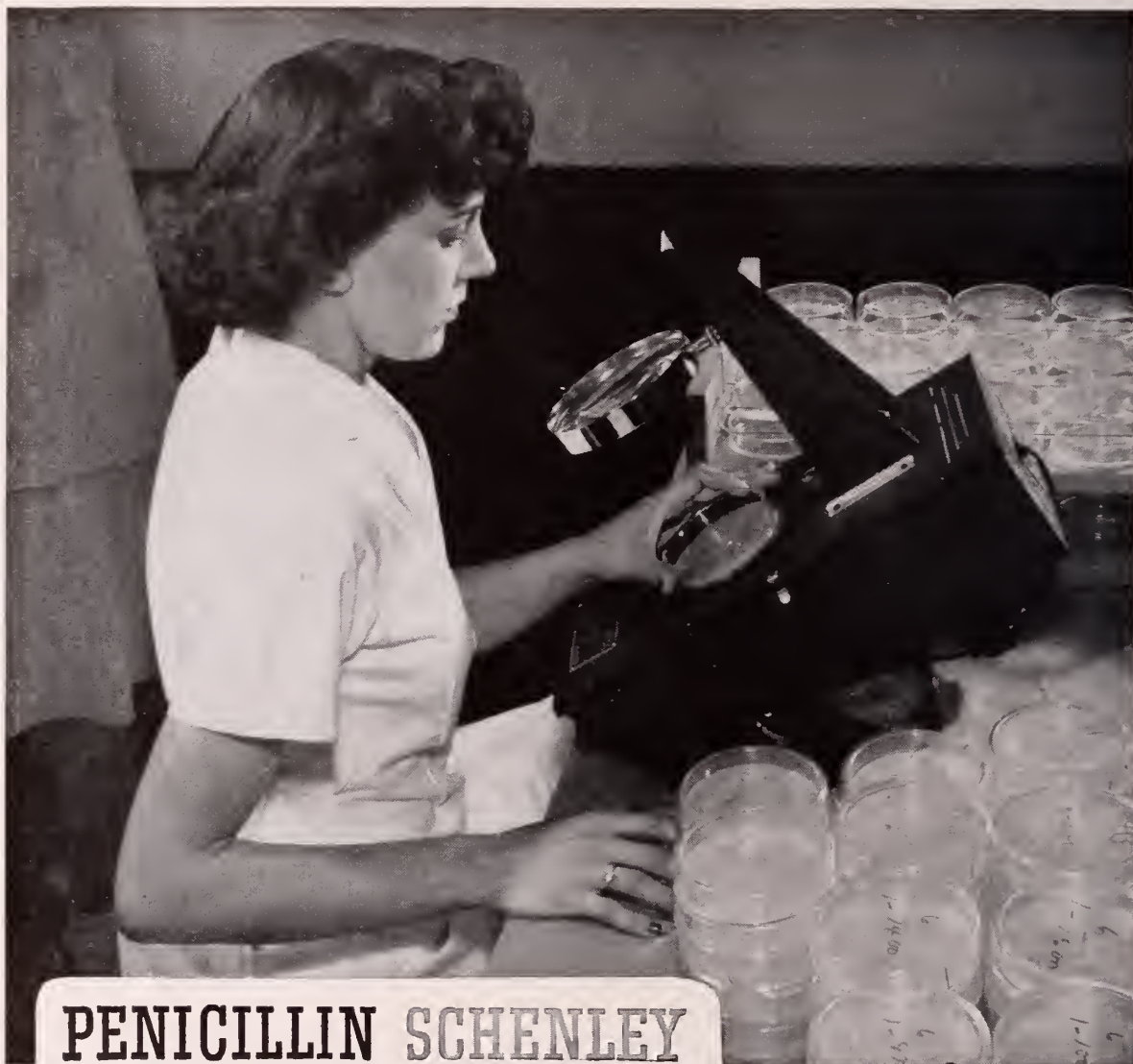
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1. Meyer, E., and Arnold, L. (1938), *Amer. J. Digest. Dis.*, 5:418.





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1. Lehr, D.: Proc. Soc. Exper. Biol. & Med. 58:11, 1945.
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\*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, *Am. J. Dis. Child.* 66:1-11, July 1943.

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## REPEAL THE RESIDENCE REQUIREMENT FOR MEDICAL LICENSURE

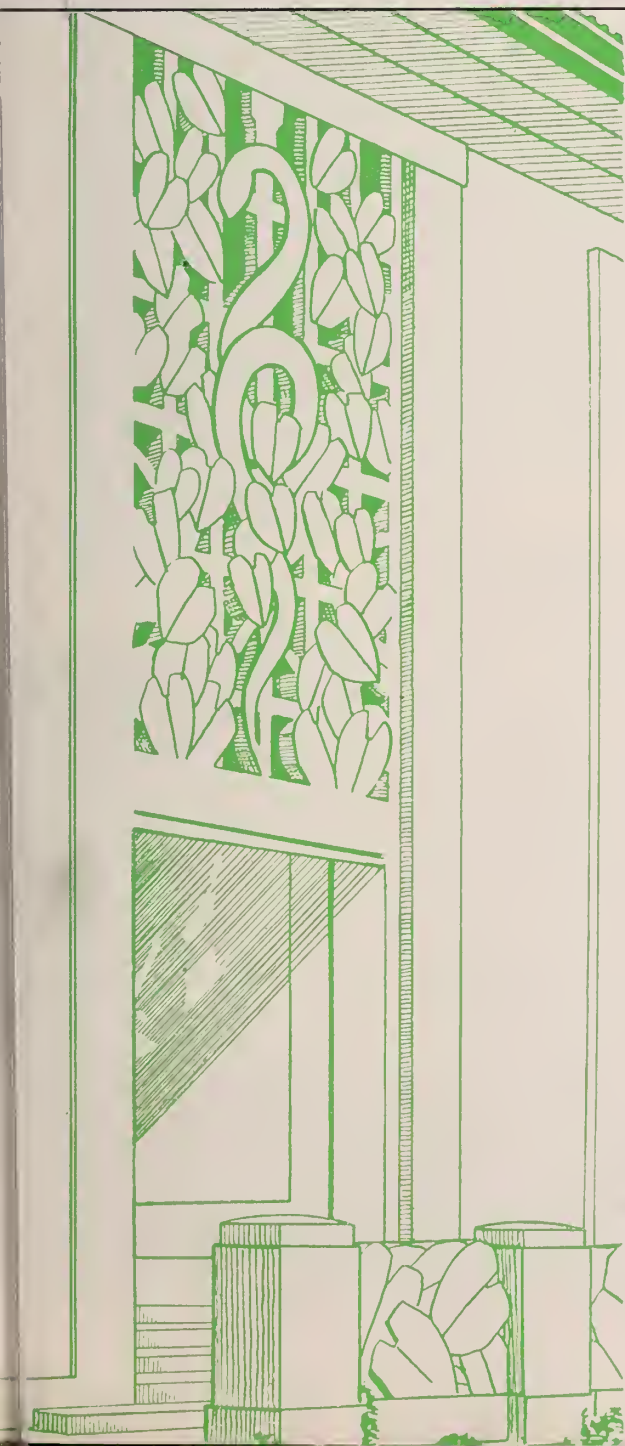
EDITORIAL

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ANNUAL MEETING, TERRITORIAL ASSOCIATION  
May 3-4-5, 1946

POSTGRADUATE LECTURES, CHAUNCEY D. LEAKE  
May 6, 7, 9, 10, 13, 14, 16, 17, 1946 at 4:30 P.M.





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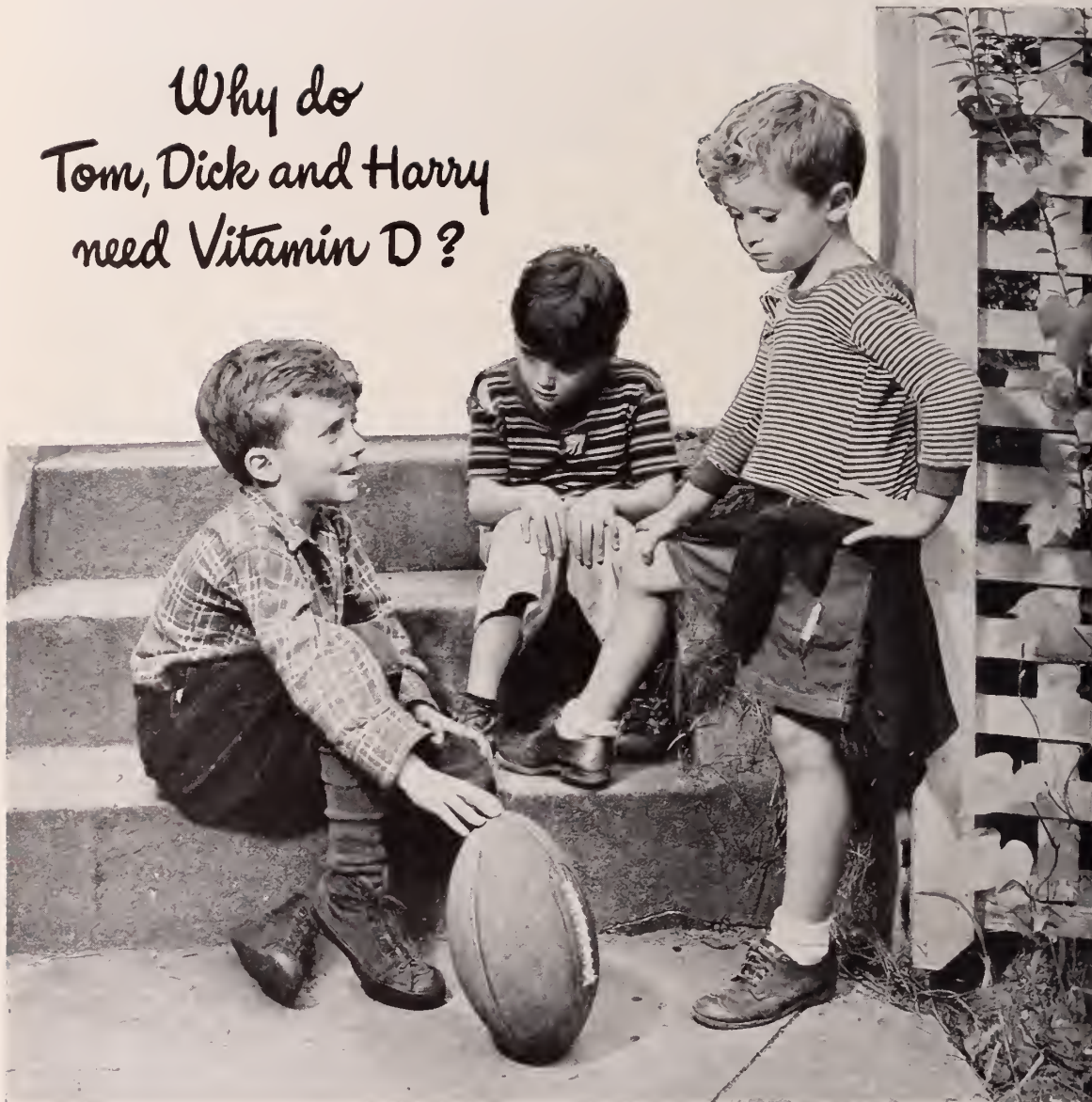
<sup>1</sup> U.S. Nav. M. Bull. 45:783, 1945, and previous annual Navy reports.

<sup>2</sup> Stokes, J.H., Beerman, H. and Ingraham, N.R.: *Modern Clinical Syphilology*, ed. 3, Philadelphia, W.B. Saunders Company, 1945, pp. 359, 300.



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1. New England J. Med. 228:118 (Jan. 28) 1943.

2. J. A.M.A. 129:613 (Oct. 27) 1945.

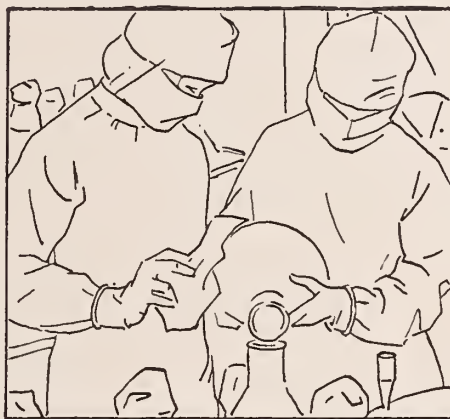


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# Penicillin Ointment in the Treatment of Infective Diseases of the Skin

HAROLD M. JOHNSON, M.D.  
HONOLULU

SINCE the advent of antibiotic medicine there has been a paucity of reports in the American literature regarding the use of penicillin or similar antibiotics in an ointment base. Undoubtedly there will be a flood of such reports in the near future since penicillin is now available to the physician.

The various sulfonamides have been incorporated in many ointment bases. Similar bases can be used to incorporate penicillin (purified) for topical use in the pyodermas.

The following study was stimulated by the author's<sup>1</sup> previous use of crude penicillium-inoculated dressings for pyodermas. Penicillin (purified) was not obtainable by civilian physicians until March, 1945, unless the case justified its use. Then it was administered almost exclusively by the parenteral route. The crude penicillin, as furnished by the Hawaiian Sugar Planters' Association, gave such a promise of effectiveness in pyogenic infections of the skin that further trial with penicillin (purified) in an ointment base seemed justifiable.

The British<sup>2</sup> have been experimenting with penicillin incorporated with combinations of lanette wax, vaseline, and soft paraffin. Their results were satisfactory. The difficulty has been the inability of the ointment to give a prolonged or sufficient concentration of penicillin to reach the infected site.

I have been using a water-miscible oxycholesterol-petrolatum base (Aquaphor) for a number of years because of its smoothness and infrequency of allergic reactions. Aquaphor has been an excellent vehicle for incorporating drugs and chemicals. Strakosch<sup>3</sup> (July, 1942) studied the bacteriostatic effect of ointments of sulfathiazole in different bases to determine whether the drug loses its action when combined in an ointment, and also to find the best base for the drug. Aquaphor was found to be by far the best base. This type of water and oil base penetrates the skin more readily and allows a slow release of the drug to the tissues.

## METHOD OF PREPARATION

We, the "P. F. C." (poor fumbling civilians), were unable to obtain penicillin for this type of study. Consequently, I made daily hospital ward rounds and collected hundreds or possibly thou-

sands of "empty" penicillin bottles. Occasionally there would be 1 to 2 cc. of penicillin solution in each bottle; I accumulated the drops by the aid of a syringe from each bottle and this would give me 1 to 3 cc. of solution for an evening's workout. Penicillin was readily obtained for the last 25 cases.

The aquaphor and ointment jars were autoclaved. Ten thousand units or 1 cc. of penicillin solution was thoroughly mixed with two ounces of Aquaphor. This produced a sterile cream containing roughly 166 units per gram. All patients were advised to keep the ointment refrigerated and to remove the preparation from the jar with a sterile tongue blade or knife.

## CASE MATERIAL

A total of 100 cases of pyogenic infections of the skin were used as a clinical trial. In this study there were 34 cases of impetigo contagiosa, 15 of sycosis vulgaris, 12 of streptococcal infection of the ears, 14 of staphylococcal-fungous infection of the feet, 10 of furunculosis, and 15 of infectious eczematoid dermatitis.

## RESULTS

Five cases of impetigo contagiosa were resistant to sulfonamide ointments when treated at home or by private physicians. These cases promptly cleared in from five to seven days. Cultures of forty-five percent of the cases revealed staphylococcus aureus and an occasional non-hemolytic streptococcus.

The "honeycomb" crusts were removed by scrubbing with soap and water in twenty cases. The remaining cases were not debrided. The debrided lesions healed rapidly, within three to seven days. Although the others were slower in healing, all cases were healed in eight days. Autoinoculation by scratching prolonged the final discharge in six cases.

The age incidence varied from two days to 84 years. One of the three newborn babies weighed two pounds, fourteen ounces and had impetiginous blebs on the scalp, folds of the neck, axillae and genito-crural areas. This baby was indeed fortunate to survive its prematurity, let alone the super-invasion of pyococcal infection. Penicillin ointment was applied three times a day, with debridement of the blebs. In four days there were no lesions. This promises to be an aid in stamping out impetiginous infections of the newborn.

<sup>1</sup>Read before the fifty-fifth annual meeting of the Hawaii Territorial Medical Association, May 4, 1945.

Fifteen cases of sycosis vulgaris, a recalcitrant staphylococcal infection of the beard areas, was treated. This follicular and perifollicular infection has a tendency to relapse and recur; and seldom, if ever, does it disappear spontaneously. In the chronic cases it may take three to six months to cure. The duration of infection varied from two weeks to six years. Three of the cases were sulfonamide sensitive from previous applications of sulfathiazole ointment. One of the three was also mercury sensitive. Penicillin ointment was applied before and after shaving and before retiring at night. There was an immediate alleviation of the burning and pruritus within twenty-four hours in all cases. There was a relapse of the infection in 6 cases and a clinical cure in 4 cases. Cultures of infected hairs yielded staphylococcus aureus.

The 12 cases of streptococcal infected ears were initiated by chronic scratching and set off by bacterial sensitization of tissue. The original allergens were various, including perfume applied behind the ears, shellacked earrings, metal eye glass guards, hair dyes, and over-treatment by irritating medications. All cases were clear within ten days.

A satisfactory response was noted in 14 cases of staphylococcal-fungus infection of the feet. The cases with lymphangitis and adenopathy responded quickly. The skin cultures were sterile in forty-eight hours but mycelial threads could be demonstrated in the macerated epithelium and vesicles. Fungous infections are not benefited by penicillin.

I was not impressed with the final results in ten cases of furunculosis. Only the early furuncles could be aborted. Pain and tenderness disappeared about as rapidly as with x-ray therapy (twenty-



FIG. 1 (A). Japanese baby, aged 9 months. Severe infectious eczematoid dermatitis following excoriation of an infantile eczema. Note toxicity of the child. (B). Six days later. Entire pyoderma has cleared, leaving original infantile eczema.

FIG. 2 (A). Chinese girl, aged 19. Infectious eczematoid dermatitis of face, ears and scalp. Slight improvement with penicillin parenterally for forty-eight hours. Penicillin ointment was then applied as the only treatment. (B). Infective process cleared in five days.



four hours). The larger suppurating furuncles showed little response.

Fifteen cases of infectious eczematoid dermatitis were treated. Three of the cases needed hospitalization. The pustular, scaly erythematous dermatitis resulted from staphylococcal invasion and sensitization. The hospitalized cases received penicillin parenterally for two days with only slight improvement. The lesions were then debrided and penicillin ointment applied. In six hours there was improvement: less pain, irritation, and discomfort. The lesions cleared in five days.

Four cases of infectious eczematoid dermatitis were superimposed on infantile eczema. Infection followed the excoriation of the eczema. One child previously had been treated by oral and topical sulfathiazole without success. Penicillin ointment cleared the process in seven days. One month later he had a relapse, but it again cleared and remained so for three months.

#### ALLERGIC REACTIONS TO PENICILLIN OINTMENT

Pyle and Rattner<sup>1</sup> reported the first case of contact dermatitis due to penicillin. Case reports of this type are not infrequent in the present literature. Penicillin is not a reactionless drug and can cause considerable discomfort and distress by repeated exposure in sensitized individuals. In the one hundred cases studied there was only one proved case of allergy. The patient was positive to

a patch test of penicillin solution and negative to the base. The Prausnitz-Kustner passive transfer test for circulating antibodies was also negative. Three other cases showed evidence of cutaneous allergy, but patch tests with sodium penicillin and the ointment base were negative. Continued use of this ointment did not produce a reaction. The reaction or flare may have been a local tissue Herxheimer response.

Forty patients who had previously received sodium penicillin parenterally for various septic infections were patch tested with penicillin (5000 units) in isotonic solution of sodium chloride. All patch tests were negative in forty-eight hours. This is a small series but it does suggest that previous parenteral penicillin therapy has a low tendency towards cutaneous sensitization.

#### COMMENT

Sulfonamide compounds enjoyed widespread use in dermatology<sup>5</sup> and other specialties until numerous cases of local and general sensitization indicated the inadvisability of their topical use. The number of deaths reported and the evidence of severe toxic cutaneous reactions caused conservative physicians to be cautious in their use. (During the last two years, I have ceased the use of topical sulfonamide, save in exceptional cases.)

Florey et al<sup>2a</sup> state: The action of penicillin on staphylococci and streptococci, unlike that of sulfonamide drugs, is influenced only to a minor de-



FIG. 3 (A). Recurrent vesicular and pustular (staph. aureus) infection of the hands. Previously sensitized by ammoniated mercury ointment and sulfonamides.

(B). Satisfactory change in six days. Pyoderma entirely clear and remained so with continued use of penicillin ointment.



gree by the number of bacteria to be inhibited. The bacteriostatic power of penicillin against streptococci, staphylococci and other organisms is not inhibited by the hydrolytic protein breakdown products of tissue autolysis, para-amino benzoic acid, or pus, substances which completely annul the bacteriostatic action of sulfonamide drugs.

There is a danger of developing a penicillin-resistant strain of bacteria by repeated exposure of low concentrations of the drug. Experiments by Demerec<sup>6</sup> indicate that the resistance of a strain of *Staphylococcus aureus* to a certain concentration of penicillin is not due to an interaction of penicillin and the bacteria, but rather it arises independently in the bacteria by mutations. Penicillin ointment may render a patient penicillin fast, but it has not been my experience so far.

This study concurs with the work of Sophian<sup>7</sup> that a higher proportion of penicillin can be kept active at the infected site than by parenteral methods especially if the area is debrided. Sophian's studies indicate that it is possible to reach a level of penicillin activity by topical administration far in excess of the highest levels maintained by intravenous and intramuscular use, namely 7 to 9 units per cc. of blood achieved by continuous introduction at the rate of 20,000 units per hour. I believe that in severe carbuncles and furuncles of the upper face and early cavernous sinus thrombosis the additional use of topical penicillin is a valuable adjunct to the parenteral use of the drug. Higher dosages should be used in the topical application such as 500 to 1,000 units per gram as this would give adequate bacteriostatic effect for a more prolonged interval.

Penicillin ointment has been clinically effective after prolonged refrigeration. Martin, of the Hawaiian Sugar Planters' Association, did ring tests of the ointment indicating growth inhibition and lysis of *staphylococcus aureus* after six weeks' refrigeration. Keyes<sup>8</sup> recently reported that penicillin ointment remains stable for one month at room temperature and for six months if refrigerated. A solution containing 1,000 units of penicillin per cc. retained its effectiveness after twenty-one days at room temperature. This is an important factor as the ointment or any of the topical preparations were previously believed to lose their bacteriostatic effect in a few days. Undoubtedly the potency of the drug is inversely proportional to the time lapsed since preparation.

The armed forces could use penicillin ointment in their prophylactic stations as it is well known that *Spirocheta pallida* and the gonococcus are susceptible and rapidly destroyed. Its lack of toxicity and tendency sensitization may make it replace the time honored calomel and astringents.

#### SUMMARY AND CONCLUSIONS

A method is described for the preparation of sodium penicillin in a water-soluble ointment base. The ease of preparation, fair stability and potent bacteriostatic effect render the drug an ideal bacterial inhibitor for the treatment of infective diseases of the skin.

One hundred cases of pyodermas were studied. Excellent results were noted on impetigo contagiosa, infectious eczematoid dermatitis, *staphylococcus-fungous* infection of the feet, and associated lymphangitis. All cases of sycosis vulgaris were temporarily improved. Sixty per cent of the cases relapsed in six weeks. Treatment of the early furuncles aborted all lesions but produced little change when the necrotic plug had already formed.

There was one case of proved allergy to sodium penicillin. Several temporary flares or exacerbation of the infection probably were tissue Herxheimer reactions as the continued use of the ointment produced no reaction: Patch tests of penicillin ointment to patients who had previously received penicillin parenterally were negative, suggesting a low tendency of cutaneous sensitization for future antibiotics.

This study suggests that a higher percentage of penicillin can be kept active at the infected site than by parenteral methods, especially if the area is debrided.

Penicillin, as used in all fields of medicine, is not a "cure-all" of infections and will not displace the art of medicine, debridement and surgery.

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# Congenital Polycystic Disease of the Liver and Kidneys

H. H. WALKER, M.D.\*

HONOLULU

CONGENITAL multiple cystic disease of the liver is of sufficient rarity to warrant presenting the following case report. Most authors who have reported on the condition, including Moschowitz<sup>1</sup> who, in 1906, had collected 85 cases, state that there is associated cystic kidney disease in the majority of instances. On rare occasion the pancreas, spleen, ovary and lung have also shown cystic change. Other malformations, such as polydactylism, meningocele, spina bifida, hypospadias and anomalies of the bladder have been reported.

According to Ewing<sup>2</sup> the condition is rather commonly seen in autopsies on malformed infants, especially females, and is responsible for death in such cases. A second group of cases of far greater rarity is observed in adults who, because of only partial liver or kidney insufficiency, manage to survive until the fourth or fifth decade of life. It is in this latter group that our case falls.

## CASE REPORT

N.S., a 52 year old Filipina woman, was admitted to Leahi Hospital on February 8, 1945, complaining of weakness, weight loss, anorexia, cough, expectoration and a painless mass in the upper abdomen. Because of language difficulties a detailed history was unobtainable, but it would appear that, although the patient had been in poor general health for some years, her major complaints dated from approximately 1937 when, after the birth of a child, her tenth pregnancy, she noted enlargement of her upper abdomen and progressive weakness. The patient's eldest daughter confirmed that her mother had been ill for several years, stating that for as long as she could remember her mother was "always sick and pregnant." In about July 1944, following a "cold," she began to cough and raise sputum. Although these symptoms continued they appeared to give less concern to the patient than the upper abdominal swelling, progressive weakness, anorexia and periods of nausea and vomiting. She went to a physician in November 1944 for a few visits, receiving five "injections" without improvement. In January 1945 she consulted Dr. Howard Liljestrand at Aiea Hospital, because of increasing anxiety over the mass in her upper abdomen which she feared might be a "tumor," and requested surgery. In the latter part of January Dr. Liljestrand performed a laparotomy in the upper abdomen and found a markedly enlarged liver, the surface of which was covered with multiple cysts of varying sizes. A

piece of tissue was removed for biopsy which was reported as follows:

"Sections show some cirrhosis of the liver. There are several cystic structures seen, the walls of which are lined by low cuboidal cells. The largest of these intact structures measures 2 mm. in diameter. Along the edges of the section portions of what apparently represent sections of larger cysts are seen. Within the cyst is seen a fine granular pink-staining deposit which probably represents a thin albuminous fluid. Impression: The microscopic picture is compatible with the clinical diagnosis of cystic disease of the liver."

Postoperative recovery was uneventful except that during the course of her hospitalization it was found that the patient had pulmonary tuberculosis and on February 8 she was transferred to this hospital for further treatment.

The symptoms at the time of admission to Leahi were as previously noted. Cough and expectoration were not severe. There were no other respiratory symptoms or history of pleurisy or hemoptysis. Gastro-intestinal complaints were notably anorexia, with periods of nausea and attacks of vomiting at intervals for many months. There was no history of jaundice, abdominal pain or edema; no urinary symptoms.

The past history revealed that the patient was born on the island of Cebu, Philippine Islands, in 1892, and came to Hawaii with her husband in 1923. She was married in 1914 and had had eleven pregnancies with six living children. The first pregnancy, in 1915, terminated in a miscarriage. Three of the children died in early infancy of unknown cause. The last pregnancy, in 1938 (?), according to the daughter, was interrupted by dilatation and curettage at Waipahu Hospital because of "a big liver." In October 1942 the patient consulted Dr. Benjamin Li, of Honolulu, because of the large mass in the upper abdomen. Dr. Li suspected malignant disease of the liver and advised exploratory surgery, which was refused. There was no other history of serious illness, operation or accident.

The family history is not revealing. Patient's mother and father died in the Philippine Islands some years ago of unknown cause. There was no history of familial liver or kidney disease, congenital malformations or tuberculosis. The Board of Health study of family's contacts failed to reveal other instances of tuberculosis.

Physical examination at the time of admission showed an emaciated, chronically ill, middle aged Filipina woman weighing 104 pounds, with a temperature of 99.6, pulse 90, respirations 22. The skin was dry and somewhat atrophied. Eyes showed bilateral pterygia. There were several palpable glands of pea size in the left supraclavicular fossa. The chest was somewhat flattened and showed dullness and medium moist rales over the left upper lung field with cavernous breathing over the clavicle. There were no rales on the right.

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The heart appeared to be slightly enlarged but was without other abnormalities. The blood pressure was 156/108. The abdomen was visibly enlarged above the umbilicus, with an irregular protuberant mass in the left upper quadrant. There was a healed midline scar above the umbilicus. Palpation revealed a huge, firm, non-tender, irregular mass filling the upper abdomen and extending to just above the umbilicus on the left and just below on the right. The lower margin, which could be felt readily through the thin, flaccid abdominal wall, was markedly irregular, due to nodules of varying size. Impression was that of a knobby liver edge. On the anterior surface of the mass, above and to the left of the umbilicus, was a tense globular swelling the size of a small grapefruit. There was a somewhat smaller mass of similar nature at the same level but to the right of the umbilicus. The patient insisted that these two protuberant masses had been increasing in size for some months, but at no time had she experienced pain. Tenderness was not present. The lower abdomen was soft and flaccid. Neither kidneys nor spleen were felt. Remainder of the physical examination was normal, except for a rather marked degree of muscle wasting.

Roentgenograph of the chest showed bilateral pulmonary tuberculosis of moderate extent, with greatest involvement on the left where there were multiple cavities in the apex. There was slight cardiac enlargement with prominence of the aortic knob.

The antero-posterior film of the abdomen revealed a large opaque shadow without clear borders, filling most of the upper abdomen and displacing gas-filled loops of bowel downward and to the left.

Laboratory studies: Sputum was positive for tuberculosis. Blood Eagle and Kahn reactions were negative. Red blood cell count was 2,950,000 with 55 per cent hemoglobin. Throughout the course in the hospital there was little change in the anemia, despite large doses of iron accompanied by liver extract. White blood cell count was 7,300 with polymorphonuclears, 71 per cent; eosinophils, 7 per cent; lymphocytes, 11 per cent, and monocytes, 10 per cent. Weltmann reaction was 6 (normal). Urinary findings throughout the course in the hospital showed consistently low specific gravity readings, averaging 1.010, albumin, 1 plus to 4 plus; white blood cells, 2 plus. On March 13 (sixteen days before death) a Fishberg urine concentration test showed 1.008, 1.012 and 1.010. Subsequent laboratory examinations during hospitalization were as follows:

Blood sedimentation (Westergren) on March 20 was 26 mm. in 15 minutes to 130 mm. in 90 minutes. Blood NPN 112 mg. per 100 cc. March 22 NPN 118 mg. per 100 cc.; total protein 9.6 grams; albumin globulin ration 1 to 1. March 23 bromsulfalein liver function test showed 20 per cent dye retention. March 29 (day of death) blood NPN 220 mg. per 100 cc. Creatinine 6 mg. per 100 cc. Urea nitrogen approximately 100 mg. per 100 cc. Blood sugar 75 mg. per 100 cc.

Clinical course: There was little change in the patient's symptoms or general condition until March 4 when she had a chill, followed by a febrile episode for four days with a temperature range from 101.6° F. to 103.8° F. The only associated symptom was increasingly marked weakness. Following this febrile episode there was little change until the last week of illness when she developed a spike-like fever curve with temperatures ranging to 101.6° F. Three days before death she became mentally confused, drowsy and complained of intense

generalized itching. The following day she became comatose and remained so until death on March 29.

Summary of autopsy examination: Body was that of a somewhat emaciated Filipina woman of about 50. The abdomen was swollen and exhibited many irregularities in the form of spherical masses of varying sizes. There was a well-healed midline incision above the umbilicus. The larynx was normal but there was intense redness and erosion of the mucous membrane of the trachea on its posterior surface, beginning about one inch above the bifurcation and extending down to and including both main bronchi, suggesting a tuberculous tracheobronchitis.

The lungs: Both lungs were adherent at the apices, the left being more markedly so. The left lung showed extensive caseopneumonic tuberculosis of the upper lobe, with several medium sized cavities in the upper portion. The right upper and middle lobes showed scattered foci of caseous tuberculosis without cavitation. Both lower lobes were edematous.

The heart: There was moderate enlargement of the right ventricle and auricle. Musculature of both ventricles was normal. Mitral, tricuspid and pulmonary valves were normal. The aortic valve showed a congenital anomaly consisting of two cusps instead of three, the right being of normal size, the left approximately twice normal. Coronary vessels showed no abnormality. There were a few scattered soft atheromata in the thoracic aorta.

The peritoneal cavity: There was about 100 cc. of turbid, yellowish fluid in the peritoneal cavity and the peritoneum was markedly thickened. There was no evidence of tuberculosis in the peritoneum or viscera. The major portion of the abdomen was occupied by an

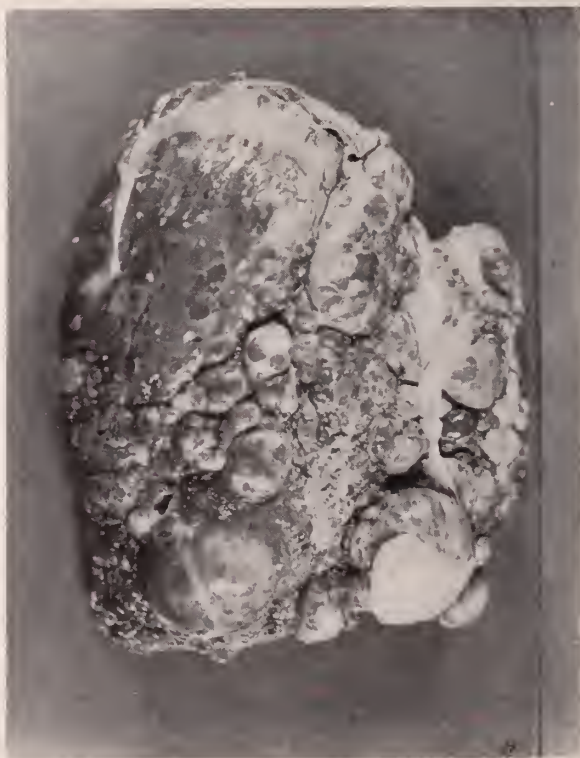


Fig. 1. Photograph of congenital polycystic liver.



enormously enlarged liver which extended from the diaphragms which were markedly elevated, to just above the pelvis, the intestines being crowded down into the pelvis. The stomach was displaced to the left. The omentum covered part of the anterior surface of the liver and was lightly adherent thereto. The entire surface of the liver showed an extraordinary collection of multiple cysts varying in size from minute grape-like clusters to some the size of a grapefruit (fig. 1). The great majority of these cysts were shiny, glistening, whitish in color and contained clear fluid. In some instances, however, notably over the upper anterior surface of the right lobe, there were numerous small opaque cysts which, when cut, exuded creamy yellow pus. The gall bladder was small and contained yellowish bile. The liver, when removed, was found to weigh 13 lbs., 4 oz. On section the entire liver was found to contain innumerable cysts of varying size similar to those seen on the surface, with intervening areas of relatively normal liver substance.

The kidneys: Both kidneys were enlarged and polycystic, the external surfaces and cut sections revealing innumerable cysts of varying sizes containing clear watery fluid (fig. 2).



FIG. 2. Photograph of congenital cystic kidneys.

The stomach, intestines, pancreas: The stomach, small and large intestines and the pancreas were normal.

The right ovary was missing but the left ovary, tubes and uterus were normal.

The bladder was normal.

The microscopic findings were reported by Dr. Irving L. Tilden, as follows:

**Kidney:** The sections show a great many cysts of varying size, all of which are lined by a single layer of low cuboidal epithelium. They are filled with coagulated fluid. The surrounding renal parenchyma is infiltrated to a certain extent by leukocytes and a few plasma cells. Some of the glomeruli are completely hyalinized and most of them show thickening of Bowman's capsule, especially the parietal layer. Some of the tubules have degenerated and have been replaced by fibrous tissue, while others are larger than normal and appear hyperplastic. All of them show marked degeneration mani-

fested by desquamation of the lining epithelium and disappearance of the nuclei. One gets the impression that there are enough glomeruli to maintain renal function and that tubular degeneration may have been the primary factor in producing the renal decompensation (fig. 3).

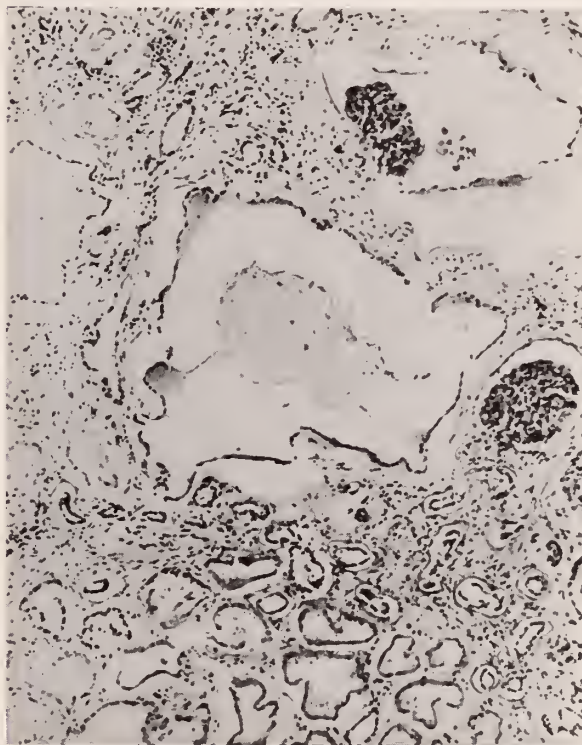


FIG. 3. Section of kidney showing cysts and tubular degeneration.

**Liver:** A number of sections were taken through the liver and these also show a great many small and large cystic spaces, all of which are lined by a single layer of columnar epithelium (fig. 4). In many fields, however, the epithelium has been destroyed, probably by pressure, and in several fields it exists in the form of two or more layers. Many of the cysts are uniformly filled with acute inflammatory exudate indicating, of course, secondary infection. The adjacent liver cells are well-preserved structurally and one would not expect that there had been any significant degree of liver dysfunction. There are several clumps of blue-staining material which, upon higher magnification, are seen to be clumps of bacteria.

**Right upper lung:** The lung tissue has been largely destroyed and replaced by discrete and confluent tubercles in which caseation is a prominent feature. Quite a large number of giant cells of the Langhans type are present.

**Left upper lung:** This section likewise shows rather marked destruction of the lung parenchyma and replacement by tubercles in various stages of development.

**Spleen:** The sinuses of the pulp are engorged with red cells and the malpighian corpuscles are very small and poorly defined. There is no evidence of tuberculosis in the section made.



FIG. 4. Section of liver showing cystic spaces.

#### DISCUSSION

Uremia, which terminated the picture in this case, exemplifies the usual mode of death in polycystic liver disease. As reported by most authors, these individuals, more commonly females, exhibit apparently good health, although liver enlargement may be present, until the fourth or fifth decade when a trivial infection such as a "cold" leads to the sudden onset of uremia. Jaundice is rare and usually there are no symptoms or signs of compression of the portal vein or vena cava (Zindel, quoted by Alessandri<sup>3</sup>). One cannot be certain as to just what precipitated the uremia in this case, although the evidence of infection in the

liver is highly suggestive. The pulmonary tuberculosis which complicated this case might also have been a factor. It is quite probable that the tuberculosis, which was quite advanced and apparently of long standing, accounted in part at least for the weakness, weight loss and other evidences of general ill health present for many months. Certain features, however, suggest diminished renal function resulting from the polycystic kidney disease, namely, anemia, hypertension, cardiac enlargement, albuminuria and the low fixed specific gravity of the urine.

That this patient could survive 52 years of life, and incidentally go through eleven pregnancies, substantiates convincingly Bodansky's statement<sup>4</sup> that "hepatic activity remains apparently normal as long as even a small fraction of the total liver tissue retains its anatomical integrity." He estimates that if "only fifteen percent of the liver is normal, practically all of its functions are carried on in an essentially normal manner."

That polycystic liver is a congenital malformation is commonly accepted at the present time, although the exact nature of the developmental defect is not known. Of the several theories advanced, that of "hamartia," that is, a defect in tissue combination in the embryonal development of the intrahepatic bile ducts, seems to be most widely accepted.

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# ESSENTIAL HYPERTENSION

COLONEL WALTER B. MARTIN, M.C., A.U.S.

BY definition, the diagnosis of essential hypertension can only be made by excluding the large number of known causes of hypertension. The first step in diagnosis, therefore, is a comprehensive and painstaking examination of the patient to determine the presence or absence of one of these known causes. The list of such causes is an impressive one: it includes such conditions as acute, subacute, and chronic nephritis, pyelonephritis and pyelitis, obstructions to urinary flow in ureter or urethra, pressure within the kidney from tumor or polycystic disease, obstruction to blood flow to kidney, either congenital or acquired, intrinsic or extrinsic; eclampsia, increased intracranial pressure, localized arteriosclerosis, coarctation of the aorta, polycythemia, irradiation of the heart, and disease of pituitary, thyroid, and adrenal glands. Heart block and aortic insufficiency will also produce a sustained elevation of the systolic pressure.

In addition it is recognized that, at times—in childhood, at puberty and menopause, and under conditions of emotional stress—hypertension of a more or less transitory nature occurs. The ultimate significance of these transitory rises is not settled. Recently Levy, Hillman, Stroud, and White reported their analysis of the physical records on 22,741 army officers. The group showing at any time transitory rises of blood pressure was analyzed as to age and was compared with the normals as to percentage of later occurrence of sustained hypertension, disability retirement, and death rate from cardiovascular-renal disease. Comparison was also made between the two groups as to death or disability from causes other than cardiovascular-renal disease. The death and disability rate in the cardiovascular-renal group was significantly higher in those who had shown transitory hypertension. It should be remembered, and it is of equal importance from the standpoint of considering an individual with transitory hypertension, that this was merely a percentage difference, and that the majority of individuals showing at some time transitory hypertension did *not* subsequently develop cardiovascular-renal disease. From

the army and insurance standpoints such figures are important, since standards for acceptance are based on relative risks. In advising the individual patient with transitory hypertension, they are of little value.

## MANAGEMENT OF HYPERTENSION

What should we do as doctors when faced with the problem of hypertension in a patient? We should take a detailed history relative to family background, infections, remote or recent, social and economic status, and habits of living; evaluate him as to personality and temperament, and examine him thoroughly to determine or exclude the presence of an organic factor.

How should we treat him? This will depend on the information we have gained from our history and physical studies. If there is a correctable physical factor, this should be treated in an appropriate manner. If he falls into what we now consider the true primary or essential hypertensive group, the problem is more obscure. We know that many of these cases live a long and useful life, that a few of them will progress rapidly (malignant hypertension), and that others will progress slowly. The prognosis should be guarded with emphasis on the hopeful aspect of the situation. Above all, we should not be guilty of adding to the already large group of victims of anxiety neurosis.

Specifically there are certain things to do. We should give him a sane and sensible picture of his problem. We should go over with him such domestic, economic, or social factors as have been uncovered by our history and advise him how to adjust to them, if they are not correctable. We should advise him as to habits of living, from the standpoint of work, recreation, rest, and exercise. If he is over-weight, we should give him definite directions as to how he should reduce. We should make judicious use of mild sedatives if an anxiety state exists, and should be careful not to create one.

After the careful initial evaluation, we should avoid excessive examinations and visits. See him only often enough to keep his feet in the path and to detect evidence of progression. These suggestions apply to the early, uncomplicated, cases. If secondary complications have already appeared,

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such as severe cardiac changes with beginning decompensation, cerebral vascular changes, or renal insufficiency, our advice will have to be modified accordingly.

Avoid, except in special cases, radical or dangerous treatment. Sulfocyanate will reduce blood pressure, but the margin of safety between a therapeutic and a toxic dose is narrow. Various surgical procedures will reduce blood pressure, but there is as yet no satisfactory proof that the results of such surgery are, on the whole, beneficial to any large number of patients.

## SUMMARY

Our knowledge of hypertension is incomplete but we do have a considerable fund of sound information. We know of a number of conditions that will result in a hypertensive state and treatment, wherever possible, should be directed toward the correction of the primary condition. No doubt in the group called essential hypertension there are a number of causes as yet undetermined. Until treatment can be put on a rational basis it behooves us to avoid doing harm.

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# OTOMYCOSIS

MAJOR DAVID A. POHLMAN, M.C., A.U.S.

**O**TOMYCOSIS, or fungus infection of the ear, presents quite a problem to the doctors practicing in a community where relative humidity is constantly high and temperature variations are small, as the so-called fungus ear is prevalent there at all times of the year.

## ETIOLOGY

The predisposing factors in fungus ear infections are: (1) Maceration due to the introduction of water into the ear, as frequently seen in swimmers. (2) Traumatism, usually due to the introduction of foreign bodies accidentally or intentionally, such as scratching ear canal with various objects. (3) Infection from various pyogenic conditions in the region of the ear. (4) Climate. This type of infection is more prevalent in tropical or subtropical zones. (5) Individual susceptibility. Some persons seem to be immune to this type of infection while others exhibit various degrees of susceptibility.

First of all let us briefly consider the anatomy of the external ear canal. It is lined with skin firmly bound to the canal walls. It contains varying amounts of wax and desquamated epithelium. It is dark and warm. It offers an excellent field for the growth of fungi. The outer half of the canal wall contains sebaceous and ceruminous glands which are constantly secreting material into the canal. When the fungus invades the superficial layers of the skin it sets up a mild irritation with resulting inflammation, which produces a wet exfoliation with an excellent opportunity for the entrance of bacteria, resulting in a secondary infection. This infection may invade the perichondrium and even cause a middle ear infection, or it may involve the entire external ear with extension to the nearby lymphatics.

## CLINICAL ASPECTS

Stokes<sup>1</sup> described otomycosis as having a first stage manifested by mild symptoms, hyperemia of the canal and drum and a moldy appearance; and a second stage manifested by an exfoliated canal filled with debris, diffuse inflammation, and varying amounts of involvement of adjacent structures.

## DIAGNOSIS

In patients giving history of recurrent attacks of furunculosis or eczema of the external auditory canal, otomycosis should always be suspected. Examination of the ear may reveal only a mild desquamation of the canal walls, a dry canal even free from wax. The patient's only subjective symptom may be an almost intolerable itching, especially at night. Then again, the entire canal may be filled with a moist mass of debris of varying colors, resembling wet blotting paper or moldy bread. When this debris is removed a marked inflammation of the lining skin is often seen, even the drum being reddened. The diagnosis of otomycosis is made by the finding of mycelia or spores in a smear of material removed from the external ear canal. This is best done by the addition of a few drops of an alcoholic solution of sodium sulfide or 10 per cent sodium hydroxide to this material and examination of it under low power in the unstained state. The fungi resist the digestive action of these solutions and retain their form. The usual fungi found in the external ear are of the genus *Aspergillus*.

## TREATMENT

The treatment of otomycosis should attain the four objectives stressed by Gill<sup>2</sup>: "1. To cleanse mechanically the external canal from the meatus to the drumhead as carefully as possible, avoiding any trauma or maceration of the skin. 2. To reduce local inflammation and allay pain. 3. To limit sporulation. 4. To leave the parts in such a condition as to prevent recurrence."

Searcy and McBurney<sup>3</sup> made extensive studies in vitro and vivo of the effect of 69 substances upon the growth of *Aspergilli* and *Staphylococcus aureus*. Alcohol in all dilutions was found to have no effect in the prevention of growth of *Aspergilli*. Boric acid alcohol and salicylic acid alcohol solutions were nearly as ineffective. The good results of these solutions were due to their desquamating effects and not to their fungicidal properties. They aid as cleaning and drying agents. Cresatin (metacresyl acetate) proved to be excellent but not as effective as 1 per cent thymol in Cresatin. A stronger solution of thymol was highly efficient as a fungicide but produced considerable burning and discomfort when used in

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raw canals. Insufflation of 1 per cent iodine and 1 per cent thymol in boric acid powder produced fair results. Ichthyol in glycerine was of value in the early treatment of acutely inflamed canals, but was found to be a poor fungicide. Glycerine preparations usually macerated the canal walls and occasionally aggravated a secondary bacterial infection.

The majority of fungus ears seen in our Clinic are generally in the second stage or that of a diffuse external ear infection. The initial treatment is along the lines of treatment of an acute external otitis. The ear is gently cleansed of all debris and a 10 per cent ichthyol in glycerine wick is firmly packed in the external canal. The mechanical relief offered by this firm pack is usually tolerated by the patient overnight. The more severe cases are hospitalized and are given continuous hot compresses of boric acid solution or Burow's solution. Infra-red radiation is of considerable benefit to allay pain. Marked swelling of the canal walls sometimes prevents removal of all debris and it may be difficult to visualize the drum head, but after 24 hours of packing and external heat this can usually be accomplished by direct removal or gentle irrigation. When this acute, diffuse inflammation has subsided the canal is then treated with a fungicide. A cotton wick saturated with 1 per cent thymol in Cresatin is packed into the canal and left for twenty-four hours. When it is removed the canal walls appear white and exfoliated. The canal is then wiped dry and all debris and dry skin are removed. The canal is repacked with the thymol-Cresatin wick again. This procedure is repeated for three days and then the canal is dusted with bismuth subnitrate powder daily and the patient is cautioned to keep his ears dry. The patient is treated at least every three days over a period of two weeks in this

manner. A case of fungus ear infection which has apparently responded to treatment should be watched for several months, as remaining spores may set up an exacerbation. Let me again stress the importance of thorough and complete removal of all debris from the canal at each visit. The canal must be kept clean and dry.

Alcoholic solutions were not used primarily because they were too painful when applied to inflamed canals. Sulfonamides have been found to have no beneficial effect used either locally or internally on *Aspergillus* infections of the external ear.

Reeh in a study of a series of cases was able to cure 55 per cent of all his cases by thoroughly cleansing the canal and using no medication except 95 per cent alcohol for drying purposes. If counterpressure was needed to prevent obstruction of the canal a small wick of cotton was inserted.

#### CONCLUSIONS

1. Otomycosis may be manifested by diffuse otitis externa, dry or moist eczema, or furunculosis.
2. One per cent thymol in Cresatin has proved to be an excellent fungicide.
3. Stress is laid on the importance of daily cleansing of the entire canal and removal of every visible particle of exfoliated epithelium.

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# LARGE-ROUND-CELL SARCOMA OF THE SMALL INTESTINE

F. F. ALSUP, M.D.

HONOLULU

**M**ALIGNANT neoplasms of the small intestine are rare. Sarcomas, according to some reports, are more commonly found in the small intestine than in the colon; and a malignant neoplasm of the small intestine is more likely to be a sarcoma than a carcinoma. Sarcoma of the small intestine is as a rule more massive than carcinoma, but less likely—since it does not arise from the mucous membrane—to produce obstruction.

According to the classification of William Boyd (Winnipeg) sarcomas of the small intestine are usually fibrosarcomas. He also states that lymphosarcoma of the small bowel may infiltrate the wall diffusely, causing a thickening of the entire wall, resembling a garden hose. This in some respects represents what was found grossly in the specimens to be discussed in the following case report.

## REPORT OF CASE

H.M., a 61 year old Japanese man, was first seen in February, 1930, at the age of 46, complaining of abdominal pain. He had had an appendectomy in 1915; he was married, and had 2 children; the history was otherwise irrelevant.

He was not studied or treated at this time, and returned in December, 1930, still complaining of abdominal pain, which was now localized chiefly about the umbilicus. Physical and x-ray studies at this time were negative, but the blood Wassermann and Kahn reactions were strongly positive, and antisyphilitic treatment was begun.

In April, 1933, at which time the patient was still receiving antisyphilitic treatment, obstipation began, and after a few days, on the morning of April 29, became associated with severe abdominal pain and nausea without vomiting. The pain was cramping, and more severe on the right side. The patient could feel a mass in this region.

He was admitted to The Queen's Hospital the same day, and laparotomy was performed. A mass was found about 14 cm. from the ileocecal junction, causing a fusiform enlargement of the ileum with great thickening of the wall, practically obliterating the lumen and causing obstruction. The mass was resected, and a side-to-side anastomosis was done.

The pathologist's report stated that the sections showed a tumor between the basement membrane and the surface of the intestine, composed for the most part of large, round, dark-staining cells with dark nuclei. There were many eosinophiles. The pathologic diagnosis was large round-cell sarcoma.

Three months after operation the patient came in complaining of generalized abdominal soreness. In September, 1933, he was still having abdominal pain and difficult bowel movements, and felt like vomiting. X-rays indicated a partial obstruction in the right lower part of the abdomen. In October, the pain increased and there appeared to be complete intestinal obstruction.

The patient was admitted to St. Francis Hospital, and on October 4, 1933, six months after the first operation, a second laparotomy was done. Again a mass was found, involving the terminal ileum and extending onto the cecum. About 60 cm. of the small intestine and cecum were resected, and a side-to-side anastomosis was done. Numerous large, soft lymph nodes were found in the mesentery and along the major abdominal blood vessels. The pathologist's report of the specimen was the same as before: a large round-cell sarcoma of the small intestine, metastatic to lymph nodes.

Following this procedure, the patient received anti-luetic treatment from time to time and also reported to Dr. Jesse Smith for x-ray treatment from time to time. X-ray pictures of the intestines taken in 1936 were negative for obstruction or any other abnormalities and since the last operation in October, 1933, the patient has been entirely free from all symptoms. His bowels move regularly and there are no attacks of diarrhoea. I last saw him on May 2, 1945, and found him to be strong and healthy, having normal blood pressure, normal urine, normal bowel movements, but he still has a positive Wassermann and Kahn for syphilis, although treatments have been given at intervals since 1930.

## DISCUSSION

It has now been twelve years since this patient was operated on for a large round-celled sarcoma of the small intestine which was found to involve mesenteric lymph nodes. Several pathologists have examined the slides and all have agreed as to the diagnosis. At the time of the examination in April, 1933, slides were examined at The Queen's Hospital by Dr. Larsen and also examined at the Pathological Department at the Tripler General Hospital and later at the Pathology Department at Stanford University. All agreed on the diagnosis of a large round-celled sarcoma. Some years later when Dr. Tilden went to The Queen's Hospital, I spoke to him about this case and he then re-examined the slide and also agreed as to the diagnosis. Recently, I have spoken to Dr. Price about the case and he has likewise agreed with the diagnosis as first made in April, 1933.

Clinically, it would appear that the pathological diagnosis must be wrong since it would not appear

that a person, with a large round-celled sarcoma of the small intestine requiring two operations and involving the lymph nodes could be alive and well at the end of twelve years, but it is perfectly evident that the findings of the pathologists have justified them in making the diagnosis of a sarcoma.

The question might arise whether his luetic condition could not in some way have been responsible for the growth and not have been detected at the microscopic examination or whether or not he might have had some form of regional ileitis which somewhat resembles the findings of a sarcomatous tumor, in that the intestinal

wall is markedly thickened until the lumen is greatly narrowed. However, the condition persisted too long for this condition as it is usually seen. The large, soft lymph nodes are also found in regional ileitis.

I have not presented this case with any idea of questioning the diagnosis made by the pathologists but have presented it because of the above explanation, referring chiefly to the apparent recovery that the patient has made after a diagnosis of a large round-celled sarcoma was made, when it is evident that the entire disease was not removed. No attempt was made to remove the large lymph nodes except those that were removed with the portion of intestine involved.

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# POLYCYTHEMIA RUBRA VERA

MORTON E. BERK, M.D. and HAZEL IRVIN, M.T.  
HONOLULU RICHMOND, VIRGINIA

**P**OLYCYTHEMIA RUBRA VERA, Vaquez's disease, is still one of medicine's fascinating clinical entities. There are now numerous cases which have been reported, and much study has been made of the disease. However, the etiology is still undetermined, and in this respect it is categorically the same as leukemia and many other blood dyscrasias.

Polycythemia has more than its undetermined etiology in common with leukemia. Attention has been focussed on cases of polycythemia which have eventually terminated in leukemia. In classical cases of polycythemia, moreover, there are variable interval findings in the blood smears which are almost compatible with leukemia. It is therefore necessary to keep in mind that a leukemoid picture is not abnormal in Vaquez's disease. This case, which has been followed over a long period of time, illustrates a true polycythemia vera in which the leukemoid picture has been variable, but at times strongly suggestive of a true leukemia.

## REPORT OF CASE

M.H., a 66 year old white woman, was first seen in the allergy clinic in June, 1933. At that time her blood count and differential were: hemoglobin 15 grams or 90 per cent; leucocytes 16,900 per cubic mm.; neutrophils 80 per cent; eosinophils 5 per cent; lymphocytes 15 per cent. There is no record of her complaint or findings.

She was subsequently seen at varying intervals in the orthopedic and eye clinics, but no blood work was done.

On July 18, 1940, she was admitted to the medical ward with a chief complaint of "pain in the left side." During the winter of 1939-40, she had become aware of a steady growing mass in her left upper quadrant. One week previous to admission she began having periods of nausea and vomiting, followed by pain in her left upper quadrant. She had no other complaints, except for hemorrhoids. Her past history revealed that she had gone through menopause twelve years previously, and had had a lipoma removed from her right side when younger. During the year preceding her admission, she had lost forty pounds. Her history was specifically negative for typhoid, malaria and rheumatic fever. She had had the usual childhood diseases. The family history was non-contributory.

Physical examination revealed a firm spleen "two finger's width" below the left costal margin. There were internal and external hemorrhoids. The examination was otherwise negative. The impression was that she

had myeloid leukemia. Blood studies showed hemoglobin 92 per cent; leucocytes 29,150; neutrophils 90 per cent; lymphocytes 8 per cent; monocytes 1 per cent.

July 19, 1940: peripheral blood smear showed marked regeneration and shift to the left. There were frequent myelocytes and one myeloblast.

July 23, 1940: red cells 6,960,000; hemoglobin 92 per cent; white cells 22,550; platelets 876,000. Mean corpuscular volume 80; mean corpuscular hemoglobin 22; mean corpuscular hemoglobin concentration 28.

July 26, 1940: the peripheral smear showed active red cell regeneration with occasional mitotic figures and frequent normoblasts and erythroblasts. There were also frequent myelocytes and rare myeloblasts. Examination of the sternal marrow showed marked hyperplasia on the erythroblastic side with a definite increase of megakaryocytes. The diagnosis of polycythemia vera was made, with the possibility that it was changing to a myelogenous leukemia.

July 30, 1940: red cells 7,800,000; hemoglobin 90 per cent; white cells 26,050; neutrophils 96 per cent. Complete x-ray studies of the gastro-intestinal tract revealed no abnormality except for a smooth mass encroaching on the greater curvature of the stomach. Urine, and blood Kline and Wassermann, were negative. The patient was discharged August 3, 1940, to be followed in the out-patient clinic.

September 3, 1940: red cells 7,240,000; hemoglobin 104 per cent; packed cells 57 per cent; white cells 13,500. Blood smear revealed very few myelocytes. The patient was started on small doses of phenylhydrazine and x-ray therapy.

On October 17, 1940, the patient came in complaining of a syncopal attack. At this time her peripheral smear showed some hypochromia and active red cell regeneration. There were frequent normoblasts and occasional myelocytes.

November 11, 1940: red cells 5,080,000; hemoglobin 90 per cent; white cells 14,800; neutrophils 87 per cent. No further complaints except for troublesome hemorrhoids.

January 9, 1941: red cells 4,420,000; hemoglobin 86 per cent; white cells 15,300; neutrophils 85 per cent.

April 11, 1941: Complaining of occasional dizzy spells. Spleen measured 16 cm. below the left costal margin, 5 cm. to the left of the midline. Red cells 4,820,000; hemoglobin 90 per cent; white cells 12,850; neutrophils 94 per cent. X-ray and phenylhydrazine were stopped.

July 15, 1941: red cells 7,260,000; hemoglobin 97 per cent; white cells 23,700; neutrophils 88 per cent. Peripheral blood smear showed 3 per cent myeloblasts, 7 per cent normoblasts.

March 3, 1942: red cells 7,750,000; hemoglobin 90 per cent; white cells 18,650.

May 26, 1942: Patient reported sudden attack of pain in the left upper quadrant five days previously. There were no other complaints. It was thought she probably had had a splenic infarction. Peripheral blood smear

From the Department of Medicine and the Department of Clinical Pathology, Medical College of Virginia, Richmond, Virginia.



showed 4 per cent normoblasts and 4 per cent myelocytes.

The patient was not seen again until 7-24-44, at which time she came into the admitting ward complaining of "bleeding hemorrhoids." Otherwise she had been feeling fine and had had no further trouble with dizziness, etc. Examination at this time revealed: a slightly enlarged heart with a soft, blowing systolic murmur heard best over the apex; radial pulses were thickened one plus. With the patient in the supine position, the spleen measured 17 cms. below the left costal margin and reached over to the midline. The organ was smooth, firm, non-tender. There were internal and external hemorrhoids. Blood pressure was 130/80. Urine and blood Kline were negative. Red cells 8,000,000; hemoglobin 92 per cent; white cells 19,250; neutrophils 78 per cent; myelocytes 10 per cent. Bleeding time, clotting time and prothrombin time were normal.

Peripheral smears showed active red cell regeneration with frequent normoblasts and occasional erythroblasts. There were occasional myelocytes and infrequent blast cells. The platelets were 699,000. Sternal marrow studies showed a marked hyperplasia of the erythroid series with many normoblasts and frequent pronormoblasts. There was also a hyperplasia of the myeloid series at the myelocyte level and promyelocyte level, but no normoblasts. There was an increased number of megakaryocytes.

August 3, 1944: red cells 7,700,000; hemoglobin 77 per cent; white cells 20,000; packed cells 49.5 per cent; plasma volume 51.7 cc/kilo (normal 45 cc/kilo); total blood volume 96.4 cc/kilo.

August 4, 1944: red cells 6,820,000; hemoglobin 68 per cent; mean corpuscular volume 66; mean corpuscular hemoglobin 16; mean corpuscular hemoglobin concentration 24. X-ray studies of the long bones showed rarefaction with some decalcification, involving especially the medulla. These changes were compatible with the rarefactions of myelogenous leukemia.

August 19, 1944: red cells 6,560,000; hemoglobin 80 per cent; white cells 23,100.

Hemorrhoidectomy was performed August 3, 1944. The patient's post-operative course was uneventful, and she was discharged August 16 to be followed in the clinic.

September 9, 1944: red cells 6,890,000; hemoglobin 80 per cent; white cells 18,700; neutrophils 77 per cent; eosinophils 1 per cent; lymphocytes 15 per cent; monocytes 5 per cent; myelocyte 1 per cent; blast cells 1 per cent. Peripheral smear showed a microcytic hypochromic anemia with normoblasts, erythroblasts and a few erythroblasts in mitosis.

The patient was readmitted to the Medical College Hospital September 16, 1944 following a sudden onset of acute right flank and upper quadrant pain, chills and fever. Examination of her urine revealed albumin, many white and red blood cells. Her blood picture was: white cells 22,500; neutrophils 90 per cent; myelocytes 2 per cent; blast cells 1 per cent; lymphocytes 4 per cent; monocytes 3 per cent. Diagnosis of acute pyelitis or pyelonephritis was made.

Sulfa therapy was started, but after 48 hours of no change in her condition, penicillin was substituted. Culture of urine taken before sulfa was given was negative. A second urine culture remained negative. Following penicillin therapy, the patient's condition improved markedly for a few days. She subsequently went into renal failure and died September 24, 1944.

Necropsy revealed an acute right pyelonephritis superimposed on an old chronic pyelonephritis which was bilateral. The pathologist's report of the gross spleen was: "weight, 1950 grams. The spleen is bluish-red, with opaque, thickened areas scattered over the capsule. The cut surface is deep red and retracted. The follicles and trabeculae are normal; there are no foci, and the pulp does not scrape away. Microscopically, the capsule is thickened and fibrous and in one section there is a small subcapsular anemic infarct. The section shows marked thickening of the fibrous tissue framework of the spleen with relatively little pulp. The sinusoids are almost empty. There are scattered atypical immature cells in the pulp and sinuses which resemble blast cells of some type. Polymorphonuclear leucocytes are fairly

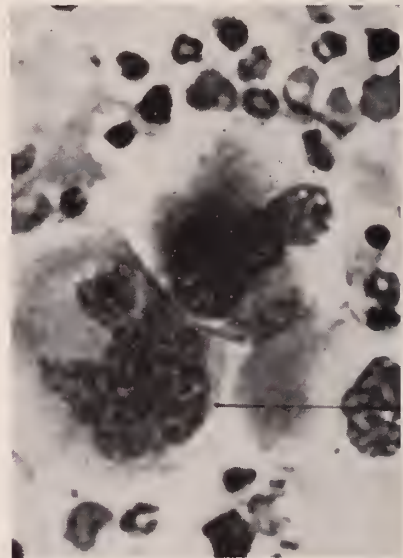


FIG. 1. Sternal marrow smear showing large megakaryocytes surrounded by any erythroblasts.

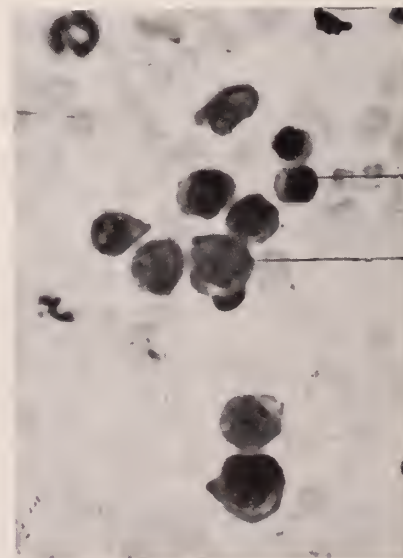


FIG. 2. Sternal marrow smear showing hyperplasia of erythroid series. Upper marker points to normoblast; lower marker points to erythroblasts.

numerous. Occasional megakaryocytes are seen. Mason's stain confirms the marked fibrosis."

Careful examination showed no true leukemic infiltration of any organ.

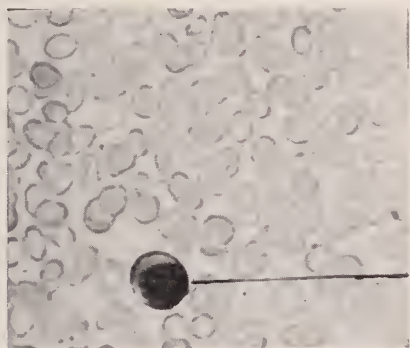


FIG. 3. Peripheral blood smear showing myeloblast.

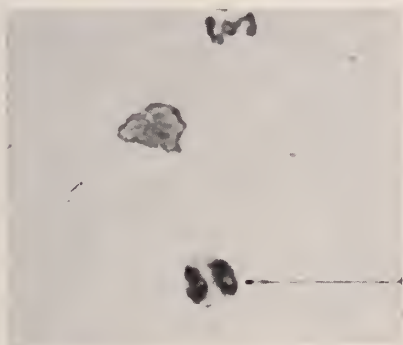


FIG. 4. Peripheral blood smear showing erythroblast undergoing mitosis.

#### DISCUSSION

Early in the studies of this patient, we were very much interested in the possibility that this was actually a polycythemia vera changing to a true myelogenous leukemia. The relationship between the two diseases has long been recognized.<sup>1</sup> The duration of the disease in this instance, however, has most definitely been against a diagnosis of true leukemia. Hanson-Pruss and Goodman<sup>2</sup> reported a case in which four years elapsed between the first recognized symptoms of polycythemia and the terminal development of leukemia. In all the cases of this nature which have been reported recently, the patients have not survived long after manifesting leukemia.<sup>3</sup>

The smears of the sternal marrow were persistently unlike leukemia. The few young cells of the myeloid series found in the peripheral smear are the usual findings in polycythemia rubra vera.<sup>7</sup> Weber pointed out that in the so-called "non-malignant leukemia," the polymorphonuclear neutrophils are relatively increased, and this was found to be true for the most part in this case.<sup>8</sup>

As noted by Frank,<sup>7</sup> the hemoglobin level was frequently increased to 160 per cent, but it does not parallel the erythrocyte count. It is interesting to note that this patient did have a markedly increased blood volume, with the plasma volume being at least 6-7 cc. higher, per kilo of body weight, than is normal. However, the chronic blood loss during the past several months from her bleeding hemorrhoids undoubtedly allowed the development of a definite microcytic, hypochromic anemia, and this a relative diminution of the packed cell volume.

The chronicity of the disease and the laboratory picture were compatible with the diagnosis of polycythemia rubra vera, and we feel that the points made by Frank<sup>7</sup> to establish a diagnosis of polycythemia vera are well taken. We agree with Weber<sup>8</sup> that the leucoblastic (myeloid) component of Vaquez's disease is almost invariably non-malignant.

#### CONCLUSIONS

A case of polycythemia rubra vera is reported in which the myeloid component is non-malignant and fits in with the leucoblastic picture usually seen in this disease.

Smears demonstrating the hyperplastic bone-marrow and peripheral blood picture are shown.

A patient with polycythemia vera may have a relatively low hemoglobin value due to chronic blood loss.

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# Hawaii

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### [EDITORIALS]

#### HAWAII'S ONE-YEAR RESIDENCE LAW

In 1939, the Hawaii Territorial legislature passed—for reasons which have never been entirely clear—a bill requiring one year's residence in Hawaii prior to examination for licensure to practice medicine in the Territory. The bill was officially opposed by the Hawaii Territorial Medical Association, but became law nevertheless. An attempt in 1945 to increase this waiting period from one year to three years was vigorously opposed by the territorial and county medical organizations, and failed to pass.

In 1944, the Honolulu County Medical Society approved retention of the residence requirement for the duration of the war emergency, partly, at least, because of the protection it afforded local physicians in military service against their practices' being taken over by newcomers. These men are nearly all back now, and the few remaining in service will be back, no doubt, by the time the Legislature meets again. This one solitary reason for continuing the law is nearly gone, and the law itself should go with it.

For it is a bad law. It protects doctors against free competition; and doctors, like other human beings, *need* competition if they are to do their best. It deprives the community of needed new doctors, many of them specially trained in fields of medicine not now adequately represented in Hawaii. It puts a premium, not on ability and training, but on shrewdness and resourcefulness in evading the restrictions of the residence requirement. It works a hardship on the doctor not associated with a large group or plantation, for he can ill afford to take an unlicensed assistant under his wing for a year, at a financial loss, whereas a group of doctors, or a plantation, can very well afford to do so. Indeed, this is already being done, and extensively.

It is a bad law from another point of view: *no state in the United States has a law like it.* This is not a valid argument against it on the face of it, for a law might be unique and still be good. But it might be construed as a valid argument against granting statehood to Hawaii, because this law, in addition to being unique, is unfriendly. The court which will grant (or refuse) statehood to Hawaii is like a court of equity, and it is an old principle of equity that those who seek it must come into court with clean hands. Hawaii's hands are not clean so long as a law like this exists here.

The people of Hawaii are entitled to be cared for by as good doctors as are available and willing to practice here, and there is no earthly reason to suppose that making doctors live here for a year first is going to help to bring this about. The majority of the doctors Hawaii has now are good doctors; they don't need to be afraid of free competition, and they are not afraid of it. They welcome it. They, and the Territory, *need* it. But they cannot get it unless the one-year residence clause is repealed!

#### "COUNCIL-ACCEPTED"

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Certain products do not come within the scope of the Council's activities: products which are official in the National Formulary or the United States Pharmacopoeia, for example. Also, some products are for one reason or another never submitted to the Council. There is currently in progress a revision of the Council's rules, to bring them into accord with recently enacted federal legislation, which will admit the products of certain previously excluded firms, as well as a few proprietary mixtures hitherto found unacceptable.

Why do pharmaceutical firms submit to this rigorous control? The more honest and respectable ones scarcely need it, and the less honest and respectable ones would get along better, according to their lights, without it. They do it for one good reason at least: *so they can advertise their products in the journals published by the American Medical Association and in the state and territorial medical journals.* Products found not acceptable by the Council on Pharmacy and Chemistry of the A.M.A. cannot be so advertised. Products exempted from study by the Council, or not submitted to it for study, can be so advertised only if they do not present the product in a false or misleading light.

Any widely marketed product which you see advertised in the pages of the HAWAII MEDICAL JOURNAL has been accepted by the Council on Pharmacy and Chemistry; any other product would, as nearly as we can tell, be accepted by it; and no product, so advertised, stands "not accepted" by the Council. This is a service to our advertisers and to our readers which we, along with a majority of reputable American medical publications, take pride in offering.

#### VENEREAL CONTACT INVESTIGATION

The incidence of acute gonorrhea and early syphilis in Hawaii is extremely low at the present time. It can, however, be made even lower by the proper follow-up of individuals exposed to gonorrhea or early syphilis.

The source of infection for all contagious cases of venereal disease should be investigated and when found placed under treatment. This investigation is the responsibility of the physician. However, if he needs help in locating the source of infection, the health department will assist him. It has a staff that can give immediate, thorough and confidential attention to such requests.

An illustration of the spread of venereal disease following the failure of a physician to report a case and follow up adequately on contacts was recently called to our attention. During November four individuals reported a girl named "Helen" as their possible source of infection. All of these individuals had located the girl through intermediaries such as taxi drivers or other types of procurers. Later in the month a girl answering the description of "Helen" was located and found to be under the care of a private physician. He was treating the patient for a condition not related to gonorrhea, although shortly prior to this time he had treated the patient's husband for this disease. The husband had not been reported and the only examination made of the wife consisted of a single smear examination for gonorrhea. It seems obvious that had the original case been followed up adequately, his source of infection would have been found, the wife would have been examined adequately, her gonorrhea infection discovered and the four individuals infected would have been saved from infection.



# COUNTY SOCIETY REPORTS

## HONOLULU COUNTY MEDICAL SOCIETY

The monthly meeting was held in the Mabel Smyth Building Friday evening, December 7, 1945, at seven o'clock. Dr. Larsen presided and 212 members and guests were present.

The movie of December 7, 1941 by Navy photographers was shown.

Dr. Halford announced a cable had been received from Dr. Moorhead sending his congratulations to the Society on the December Seventh anniversary.

Dr. Halford made a plea for further contributions to the Library Endowment Fund.

Dr. Larsen told of the need for medical books and journals in Manila. A box for their collection has been placed at The Queen's Hospital with Dr. Berk in charge of the project.

The following program was presented by the staff of U. S. Naval Hospital, Aiea Heights, with Captain Dirk M. te Groen as chairman:

1. Comdr. Stanley J. G. Nowak, (MC) USNR: Surgery of the Sympathetic Nervous System—Indications. Discussed by Dr. Cloward.
2. Lt. Comdr. Samuel H. Gray, (MC) USNR: Recurrent Acute Pancreatitis: Clinical Considerations. Discussed by Dr. Fennel.
3. Lt. Comdr. Charles W. Peabody, (MC) USNR: Internal Derangements of the Knee Joint—Types and Treatment. Discussed by Dr. Cooper.
4. Lt. Comdr. Clayton B. Ethridge, (MC) USNR: Acute Pericarditis Simulating Coronary Thrombosis—Differential Considerations. Discussed by Dr. Hartwell.

After the scientific session, leis were presented to the speakers. In special commemoration of December Seventh, Dr. Larsen read the list of all doctors from the Territory who had served in the armed forces in World War II. Leis and certificates were presented to those who have returned from service. A special welcome was extended to all those resuming their civilian practice.

The doctors adjourned to the lounge for refreshments. The four Honolulu County doctors recently promoted to captaincy in the Navy provided champagne for all.

★ ★ ★

A special meeting took place at 4:30 Friday afternoon, December 28, in the Mabel Smyth auditorium. Dr. Larsen presided and about 50 members and guests were present.

Major J. H. Milstone, Virologist, 18th General Medical Laboratory, U.S.A., presented a paper entitled "Epidemiology of Influenza with a Report of Recent Laboratory Studies on Oahu" with discussion by Dr. Morton E. Berk.

★ ★ ★

The January meeting was held Friday evening, January 4, 1946, at seven in the Mabel Smyth Building. Dr. Larsen presided and 96 members and guests were present.

Dr. Larsen summarized the recent actions and discussions of the Board of Governors' meetings.

Members were urged to give all suggestions for revising the By-Laws to Dr. Robert Faus.

A statement in favor of statehood for Hawaii was read. The president said that in the absence of any violent objections, the Honolulu County Medical Society would present the statement to the Statehood Commission.

A Disaster Committee has been proposed. The suggestion will be voted on at the next membership meeting.

Dr. Harry Arnold, Jr. spoke about Benadryl, a new drug for the treatment of allergic diseases.

The following program was presented by Tripler General Hospital under the chairmanship of Major Brookens:

1. Movie: Clinical Malaria.
2. Major O. J. Koepsel, "Wound Handling and Wound Healing" (some of the interesting findings of the Army research centers).
3. Captain D. A. Roman-Vega, "Anesthesia."
4. Training movie in color.

The scientific session was followed by refreshments.

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On February 7 the Society met in the Mabel Smyth Building at 7 p.m. with 98 members and guests present. Dr. Larsen presided.

The chairman reported on recent actions of the Board of Governors and extended a welcome to new members.

By unanimous vote Dr. James A. Morgan and Dr. George F. Straub were elected to honorary membership.

Dr. Price presented a report of his attendance at the American Medical Association Convention in December as an alternate delegate from Hawaii.

Two Army movies, *The Fly* and *The Louse*, were shown.



Dr. Robert Faus gave a graphic description of his army medical corps experiences including the establishment of a hospital on Ie in 1945.

Dr. Rodney West gave a sharply contrasting picture of the navy medical corps establishment on tiny Johnston in 1942.

The staff of Leahi Hospital presented a program on tuberculosis. Dr. Walker was prevented by illness from speaking about "The Place of the General Practitioner in the Tuberculosis Program." Dr. Marks described mass x-ray survey with miniature film. Dr. Perlstein demonstrated "Non-tuberculous Chest Lesions" by the use of slides.

Members and guests adjourned to the lounge for refreshments. There Dr. Jesse Smith exhibited stereoscopic x-rays of the chest.

H. C. GOTSHALK, M.D.,  
*Secretary*

### HAWAII COUNTY MEDICAL SOCIETY

The 245th regular monthly meeting was called to order by Dr. Seymour, Vice President, in the staff room of the Hilo Memorial Hospital at 7:10 p.m., December 6, 1945. Present: 18 members and 1 guest.

Dr. Wilbar's letter in regard to the educational program on cancer during the month of April, 1946. Dr. Patterson moved the secretary write to Dr. Wilbar assuring him of our full support. Passed.

Our Councillor, Dr. L. L. Sexton, then reported on the Proceedings of the recent Councillors meeting in Honolulu.

The motion of Dr. Patterson of the previous month that the Hawaii County Medical Society's portion of the medical library be named after Dr. F. Irwin, tabled for a month, was acted upon and unanimously passed. In the previous minutes this motion was erroneously reported in that the new wing of the Hilo Memorial Hospital be named after Dr. F. Irwin. Dr. C. B. Brown moved that this action be given to the Managing Committee for approval and that the whole library, including that portion maintained by the Hilo Memorial Hospital, be named after Dr. F. Irwin. Passed.

Mr. John G. Ciciarelli, resident vice president, spoke on Mutual Benefit, Health and Accident Association of Omaha. This is a group offer and in order to qualify more than 50 per cent of the members must apply. This is an individual matter and was rightfully so maintained.

The scientific part of the evening was a symposium on Tetanus by Drs. L. L. Sexton, C. B. Brown and L. Bernstein.

Dr. Bernstein stated that within a short time, records covering tetanus immunizations will be kept on file at the local Board of Health office and these will be available to the physicians upon request.

Meeting was adjourned at 10:15 p.m.

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The 246th regular monthly meeting was called to order by Dr. W. Leslie in the staff room of the Hilo Memorial Hospital at 7:30 p.m., January 3, 1946. Present: 14 members and 2 guests. Mr. C. V. Kiltz, administrator of the hospital, newly arrived from the mainland, met members of the society.

The secretary read a communication from Dr. E. A. Fennel that he will meet with the Hawaii County Medical Society on February 9, 1946.

A letter from Mr. Kiltz was read, that the Managing Committee at its regular meeting on December 18, 1945 approved our decision to name the medical library after Dr. F. Irwin and also agreed that the name "Fred Irwin Medical Library" was appropriate.

An opinion rendered by Miss Rhoda V. Lewis, acting Attorney General, on the question of fees to government physicians for the performance of autopsies on coroner's cases by the Police Department was read. Heretofore such services were being paid by the Police Department but Chief Larsen maintained that this is part of the duties of the government physicians according to territorial law and does not call for extra remuneration. Dr. C. L. Wilbar, Jr. thought otherwise and this question was taken to the attorney general. According to the opinion rendered "salaries of the government physicians are not provided for by territorial statute. Performance of the autopsies by the government physicians is required by territorial statute."

The Bureau of Crippled Children of the Board of Health is undertaking a program of testing hearing among school children. Miss Kent has already been appointed as the field worker. She will perform the audiometry, visiting the different schools and those found defective will be referred to specialists. The reaction of this society was sought to such a program. Much discussion followed.

Finally Dr. I. Larsen moved that the society vote in favor of the program but the cases should first be referred to the private physicians and then through them routed to the specialists when thought necessary. Passed.

Dr. W. Leslie mentioned that the chest survey has covered to date about 16,000 cases, excluding the repeats. Kohala, Kau, Puna, Hamakua and

the local high school have already been covered. He sees a gradual change in the attitude of the people, in that most of the cases are now willing to come into the Puumaile Hospital for treatment. In regard to the active cases awaiting hospitalization, he recommended the aid of the Board of Health nurses to teach isolation technique.

Dr. I. Larsen announced that the plantation physicians are having skin clinics with Dr. H. Johnson on the 17th, 18th and 19th of this month. Private consultations may be arranged through Dr. Larsen.

The rest of the evening was devoted to symposium on nephritides. Dr. H. Yuen spoke on the etiology and differential diagnosis of nephritides, Dr. W. N. Bergin on treatment of nephritis and nephrosis, and Dr. A. Orenstein on recent advances in chemotherapy, namely sulfa drugs and penicillin. Considerable discussion followed but the general impression was that nephritis is still a dark chapter in medicine.

Meeting was adjourned at 9:45 p.m.

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The 247th regular monthly meeting was in the form of a dinner meeting held at the Hilo Country Club at 7 p.m. on February 9, 1946, with Dr. E. A. Fennel, President of the Territorial Medical Association, as our guest.

The question of medical representation on the Hilo Social Council was postponed until more information about the Council was obtained. Dr. Leslie is to report to the society at the next meeting.

The secretary read the following communications:

Since January 1, 1946, under the EMIC program, additional fees have been paid for (a) treatment of illness of infant, in home, office or hospital; (b) treatment of non-obstetrical condition of mother—in home or hospital. "For each visit beyond twice the minimum number of visits required for full routine fee: \$2.00 per office or hospital visit; \$3.00 per home visit. For exceptional amount of work required during any visit, fee increased to maximum of \$10.00 per visit, depending on amount of time and type of work required. Maximum fee for any case is four times the routine fee."

† † †

Hawaii Medical Service Association is now ready to organize in Hilo. Mr. R. Carter has obtained Mr. James Carroll as the manager for the Hilo office and the work is to begin either on March 1 or April 1, 1946.

† † †

Mrs. Bennett, executive secretary, announces that there will be a post-graduate course conducted by Dr. Chauncey D. Leake, Dean of the Medical School of the University of Texas, for a period of three weeks following the meeting of the Territorial Medical Association

from May 2 to 5. This is under the auspices of the Honolulu County Medical Society and this year the course is being offered free to all members. In view of the difficulties for doctors of the outlying islands to be away so long, we have decided to invite Dr. Leake to this island over one weekend during his stay.

† † †

Dr. I. L. Larsen wrote that the Plantation Physicians are having Dr. H. Johnson talk on Congenital Syphilis at the Hilo Memorial Hospital on February 16, 1946 at 7 p.m. All are invited. Private consultation may be arranged through Dr. Larsen.

An informal round table discussion was then held with Dr. Fennel. He talked on the following points:

Honolulu County Medical Library and the \$500.00 appropriated by the Territorial Medical Association annually. In view of the excellent service this library is extending to the outlying doctors, it was pointed out that the annual gift of \$500.00 to the library is a just one. This library is maintained chiefly by two sources—(a) Endowment Fund, which is being continuously enlarged by subscriptions from certain Honolulu firms as well as from Honolulu doctors. (b) The money derived from the welfare department as payment for services rendered by Honolulu doctors in Honolulu hospitals to indigents. This money is entirely turned over to the Honolulu County Medical Society and the Honolulu County Medical Library.

Technician registry—now maintained by the Board of Health on a purely voluntary basis but Dr. Fennel saw distinct danger of this becoming mandatory in the years to come.

All outlying doctors while on a visit to Honolulu should check in and out at the Territorial Medical Association office in the Mabel Smyth Building via telephone as there have been many occasions when visiting doctors were wanted.

Dr. Kepner's Committee on neuropsychiatry. This committee is working on several model bills to be presented to the legislature to rectify the chaotic state of the laws pertaining to mental cases. They are now being referred to the Public Health Committee of the Chamber of Commerce.

Change in constitution of Territorial Association. There will now be a president-elect and the secretary and treasurer will be elected to serve for 3 years each.

Social Welfare. Dr. Fennel saw the necessity of free choice of physicians by the indigents and payment to doctors for services rendered. Honolulu County is so run and the money realized is used to maintain the Honolulu County Medical Library. Situation in Hilo is different and he saw the necessity of instructing our councillors and delegates to see if some change can be brought about through the Territorial Medical Association.

Hawaii Medical Service Association, Veteran medical care and free medical care by the plantations to all employees. Dr. Fennel thought that these are necessarily related one to the other in the medical economics of these islands.

In regard to the Veterans' Administration, Major General Paul Hawley stated that it is the aim of the administration to handle the medical problem of the veterans through the State Medical Societies. In this respect,



should we have such an agency as the H.M.S.A. operating, it would serve the ultimate good of the medical profession.

The free medical care to all plantation employees is to be revamped at the end of a year. At present the plantations are of the opinion that to have extended their free medical care without consulting organized medicine was in itself an error. Here, too, H.M.S.A. should come in to serve both parties well. When the H.M.S.A. was originally started in Honolulu it met strong difficulties from two sources:

- a. Patients took advantage of the insurance and consulted physicians unnecessarily. Hence the payment by the patients themselves for the first visits.
- b. Chisellers among the profession padded their bills. Three doctors were found guilty and after this was corrected, H.M.S.A. began to run smoothly.

With evident signs that some form of socialized medicine is coming, it behooves us to get back of the H.M.S.A. and see to it that it is established here as soon as possible. It is already a going concern on Kauai, and Maui definitely wants it.

At the last Territorial Medical Meeting, it was evident that our councillors and delegates were not instructed in regard to our stand on various problems. Probably part of this can be corrected by requiring of our officers an understudy period by staggering and lengthening the term of office.

S. MIZUIRE, M.D.,  
*Secretary*

#### KAUAI COUNTY MEDICAL SOCIETY

The regular meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital on Wednesday, November 14, 1945, at 7:00 p.m.

Members present were: Drs. Liu, Kuhns, Chisholm, Umaki, Harris, Chang and Brennecke.

Committee reports were called for—

Psychiatric Committee—no report

Committee on Home of the Aged—had no report requiring formal action but some informal discussion followed.

Laboratory Committee—important features of which were:

1. Requesting Dr. Ecklund to give a definite statement as to what his plans are concerning his future on Kauai.
2. Outlining recommendations for laboratories on Kauai.

Considerable discussion followed the reading of this report and Dr. Brennecke made the following motion, "That all previous recommendations of the Society and the Laboratory Committee be tabled until after Dr. Ecklund is officially discharged and then that the Society write to him asking definitely whether he plans to resume his practice in his previous capacity on Kauai." Passed unanimously.

Dr. Wallis' report of the Territorial Medical Council meeting was read.

It was announced that Dr. Fennel will be present at the December meeting of the Society.

There being no further business, the meeting was adjourned at 8:45 p.m.

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The regular monthly meeting of the Kauai County Medical Society was held at the G. N. Wilcox Memorial Hospital on Wednesday, December 12, 1945, at 7:00 p.m.

Members present were: Drs. Umaki, Chisholm, Wallis, Liu, Chang, Masunaga, Boyden, Kuhns and Harris. Guests present were: Dr. Fennel, Depp and Toney.

Dr. Fennel led a discussion of numerous problems affecting the members, such as full medical care for all plantation employees, EMIC, Kauai laboratories, etc.

The meeting adjourned at 10:00 p.m.

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The regular meeting of the Kauai County Medical Society was held on Wednesday, January 9, 1946, at 7:15 p.m.

Members present: Drs. Umaki, Wallis, Chang, Masunaga, Liu, Brennecke, Harris; guests: Drs. Depp, Toney and Enright.

Minutes of the previous meeting were read and approved.

Psychiatric Detention ward was discussed and it was explained that the Wilcox Memorial Hospital will provide accommodations at \$8.00 per day. Medical care of these patients was discussed without reaching any satisfactory conclusion. This problem was referred to the Psychiatric Committee, and it was suggested that Dr. Wallis, as member of that Committee, contact the County Attorney to acquaint him with this problem.

Dr. Wallis gave a short discussion of the Kauai Medical Service Association, pointing out the working mechanism and giving financial statistics. Inasmuch as the HMSA is the only bulwark between the physician and government medicine, Dr. Wallis pointed out that if the doctor could explain to the patient that this plan does not usually cover chronic illnesses, and thereby prevent application for these illnesses going to Honolulu and being turned down, it would be a great help toward preserving the KMSA on Kauai, because when an application of this kind is turned down legitimately by the Association, it cannot help but have a deleterious effect upon the Association. Dr. Wallis requested the opinion of members regarding this situation. Most of the members appeared to be in sympathy with this problem.



Announcement: The Ecklund Laboratories will close as of March 31. Much discussion followed and the following are some of the most important conclusions and suggestions:

(1) It was felt by some that Kauai is quite small and hence would not be able to support a pathologist or at least would have great difficulty in supporting a pathologist.

(2) The G. N. Wilcox Memorial Hospital is very anxious to institute a laboratory with a pathologist.

(3) An enumeration of the possible sources of income for a pathologist reveals that it would be either a marginal amount or insufficient.

(4) Dr. Wallis suggested as a temporary solution that each laboratory equip itself with a technician and send sections and slides and other complicated work to Honolulu.

(5) Dr. Brennecke expressed himself as being strongly in favor of having a pathologist on Kauai under any circumstances and that every effort should be put forth in order to secure one.

(6) Dr. Enright explained that the Board of Health should begin to operate about the end of March or beginning of April, and that when it is functioning it would be able to do the following work: All blood serology, stool examinations and all tests of communicable diseases, blood cultures but not blood chemistries.

(7) Dr. Umaki felt that in any temporary arrangement which may have to be made, a place be reserved for a pathologist if and when we can secure one.

Following the above discussion and as a means to expedite solution of the issue, Dr. Wallis made the following motion "that each group, such as the HSPA, Wilcox Memorial Hospital, Police Department, Mahelona Hospital, etc., interested in this laboratory situation be asked to appoint a representative and that these representatives meet to discuss the problem of raising funds for a pathologist." Seconded by Dr. Harris and passed.

A letter from Dr. Wishik concerning the status of the family physician and the treatment of patients under the Bureau of Crippled Children was read. Dr. Wallis moved that we accept Dr. Wishik's proposal.

Dr. Umaki presented letters from Mr. Larsen, Chief of Police, Hilo, Hawaii, Dr. Wilbar and the attorney general concerning the status of the government physician with relation to autopsy and coroner's cases, i.e., whether payment should be made by the Police Department or this work be a portion of the duties as government physician.

Dr. Wilbar's letter concerning the regulations for private mental institutions was presented. It

was announced to the Society that Capt. Gross, our Public Health Officer on Kauai, is soon to be transferred. Dr. Wallis moved that the Society write to Dr. Wilbar concerning Capt. Gross and request that he be retained for a while or at least until some suitable individual becomes available for the position.

Dr. Depp's application for transfer to Kauai County Medical Society was acted upon favorably and Dr. Liu moved that the Society accept Dr. Depp as a member.

This being all the formal business to be considered the meeting was turned over to Dr. Enright. He made the following announcements:

(1) A new method of reporting immunization to the Board of Health is being instituted. This is to be done via post card to the Board of Health.

(2) Dr. Enright warned that pregnant women with German measles should be reported, giving the month of pregnancy. This was requested because of the strong tendency of the disease to cause anomalies in the foetus.

(3) There is an epidemic of virus gastroenteritis in Honolulu. No food can be found to be the cause of this epidemic.

Meeting adjourned at 9:45 p.m.

H. W. HARRIS, M.D.,  
*Secretary*

#### MAUI COUNTY MEDICAL SOCIETY

A regular meeting was held November 30, 1945 at the Wailuku Hotel. Present: Drs. Von Asch presiding, Balfour, Kanda, Shimokawa, Izumi, McArthur and Sanders. Guests: Drs. Shanahan, Beule, Ianne, and Miss Bailey of the Bureau of Crippled Children.

Dr. Shanahan gave a talk on psychiatric problems in the Territory. There was discussion of the Maui situation in this field and some psychosomatic problems in general.

Dr. McArthur reported on the Territorial Association Council Meeting in Honolulu in November. At that meeting it was unanimously voted that Dr. Fennel and Dr. Wilbar, as a committee, discuss with Mr. John Wilson free choice of physician and fee schedule problems of Department of Public Welfare patients.

JOHN SANDERS, M.D.,  
*Secretary*

## PSYCHIATRIC COMMENT

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### BILLS PERTAINING TO MENTAL HYGIENE WHICH WERE INTRODUCED IN THE 1945 LEGISLATURE

#### Bills Which Passed

Senate Bill 245 was enacted into law as Act 102, S. L. 1945. This Act relates to the Bureau of Mental Hygiene, and gives the Board of Health power to approve more places for mental hygiene patients to stay while they are being examined. While formerly the Bureau of Mental Hygiene conducted in-patient and out-patient clinics for the examination, study, diagnosis, and treatment of cases of mental illness in conjunction with any (one) private hospital approved by the Board of Health and with any hospital approved by the Board of Health on the other islands, Act 102 states that these clinics may be conducted in conjunction with any "individuals, hospitals, and institutions, whether governmental, charitable, or private, approved by the Board of Health."

Senate Bill 292 became Act 106, S. L. 1945. This Act merely amends section 2581, R. L. 1945, by substituting for the phrase "the commissioner of public health" the phrase "the president of the Board of Health."

House Bill 640, in a somewhat revised form, became law as Act 165. This amends section 4040, R. L. 1945, relating to the transfer of feeble-minded and epileptic persons to the Waimano Home from the Territorial Hospital, and authorizes the Governor to transfer from the Territorial Hospital to the Waimano Home on the application of the medical director any *epileptic* person, who in the opinion of the medical director, is believed to be epileptic and not insane, such epilepsy being of such degree and of such character as to warrant his confinement for his own welfare, or the welfare of others, or the welfare of the community. Section 4040 formerly permitted this procedure in the case of feeble-minded persons but not in the case of epileptics. Inasmuch as Waimano Home is for the care and treatment of both feeble-minded and epileptics, this change was a proper one.

Senate Bill 349 was enacted into law as Act 201, S. L. 1945. It amends chapter 69, R. L.

1945, relating to the Territorial Hospital, by inserting therein a new section relating to the disposition of proceeds for expenses attending the reception, maintenance, and care of non-indigent persons. Section 4013 provides that every non-indigent person committed or admitted to the hospital shall be liable for the expenses attending his reception, maintenance and care at the hospital; and the attorney general whenever requested by the director shall take steps by suit if necessary to compel this payment and secure the payment by attachment of any property of such persons not exempt from execution. Formerly, these moneys went into a general fund and did not accrue to the benefit of the hospital. The amendment logically provides that such moneys shall now be paid into a special fund which shall be expendable for the erection of structures and other permanent improvements to land at the hospital.

Senate Bill 263, S. D. 1, became law as Sections 1, 2, and 3 of Act 276, S. L. 1945. These sections appropriate the sum of two hundred thousand dollars (\$200,000) to augment previous appropriations for the construction and equipment of a treatment unit at the Territorial Hospital for the Mentally Ill at Kaneohe, Oahu, thus making a total of \$446,000 available for the same. This is an essential project, the Territorial Hospital being in need of 200 more beds to house its present population, without any allowance for beds required for proper segregation, and for prospective increase in patient population, which has been at the rate of 60 per year.

Plans and specifications for a modern treatment unit are complete, and the contract will be let as soon as labor and materials are available. The estimated cost per bed in this unit is probably not more than 50 per cent higher than it would be in a unit designed only for custodial care. The development of a strong treatment program makes it essential that the hospital have a concentration of treatment facilities for patients who are of good prognosis and require intensive treatment.

Senate Bill 264, S. D. 1, became Act 222, S. L. 1945. This Act amends Section 4019, R. L. 1945, relating to the conveyance of patients to the Terri-



torial Hospital. The effect of this Act is to require the Department of Institutions to convey to the Territorial Hospital patients committed thereto, the expense of which conveyance is now borne by the several counties rather than by the Territory. The expense of the attendant accompanying the patient is still borne by the several counties.

### Bills Which Failed to Pass

Following are bills which were introduced but not passed by the Legislature, with some comments as to the reasons for their failure to pass. House Bill 680 failed to pass. This proposed to amend section 4005, R. L. 1945, relating to the qualifications of the Territorial Hospital medical director, by requiring three years' residence in the Territory immediately preceding the appointment. The present requirements for the medical director are: that he shall be a duly licensed physician of the Territory, who shall have at least ten years' experience in the actual practice of his profession, and, immediately preceding his appointment, at least five years of practical experience in the care and treatment of patients afflicted with mental diseases, at least two years of which shall have been as a member of the medical staff of an institution for their care and treatment. The Director of Institutions may prescribe additional qualifications for the medical director. The objection to this bill is obvious, in that it would have limited the choice of a medical director for this important hospital to local residents regardless of their personal and professional qualifications. It has been suggested that a change in these qualifications be made at a subsequent legislature so as to require that the medical director of the hospital be certified as a psychiatrist by the American Board of Psychiatry and Neurology, Inc.—a requirement already existing for the director of the Bureau of Mental Hygiene (section 2551, R. L. 1945).

Senate Bill 325 also failed to pass. It proposed to amend the last paragraph of section 2552, R. L. 1945, so as to provide for required hospitalization under court order and otherwise, of certain persons in the Bureau of Mental Hygiene and its in-patient mental hygiene clinic, and for court order for such hospitalization. This measure will no longer be necessary, in view of pending licensure of The Queen's Hospital, by the Board of Health, to operate a "private mental institution" or department, as provided in sections 2581-2585, R. L. Hawaii 1945. Commitments to The Queen's Hospital will then be on the same basis as those to the Territorial Hospital, private patients making

arrangements with their own private psychiatrists, free patients probably to be cared for as mentioned in the next paragraph.

Senate Bill 287 likewise failed to pass. It proposed to amend chapter 47, R. L. 1945, by requiring any Territorial or county physician who, as such physician, has any *indigent* patient suspected of being mentally ill, to refer such person to the Bureau of Mental Hygiene of the Territorial Board of Health for psychiatric examination, evaluation, treatment, and disposition. It was agreed by many concerned that this plan would be desirable in certain cases. Present plans are reportedly for the Bureau to have a new full-time director, to cease treating patients, and to employ outside psychiatrists to treat hospital cases. Many persons believe that the choice between The Queen's Hospital and the Territorial Hospital should be reserved to the committing physician and the patient's family, that ordinary short-term cases of good prognosis should go through the Bureau, and that rotation and choice of physicians should be permitted the patient within limits. It is also generally believed that free hospitalization for such indigent patients at The Queen's Hospital should not exceed thirty days, in view of the much greater cost to the taxpayer of hospitalization there as compared with the Territorial Hospital.

Senate Bill 276, which proposed to change the terminology in chapter 69, which refers to the Territorial Hospital, also failed to pass. In general these changes—for example, from "insane" to "mentally ill," etc.—are certainly desirable. However, they are so numerous that further study seems to be indicated before deciding whether it would be wiser to adopt these changes, or to propose substituting new statutes which have operated satisfactorily elsewhere.

The sections in Bill 276 which would have required *all* mentally ill persons to go to the Bureau of Mental Hygiene were found objectionable by many, who believe the choice of hospital and doctor should ordinarily be reserved to the patient, particularly if he can pay his own way.

Senate Bill 293, which proposed to change the terminology in chapter 305 regarding guardianship for incompetent persons, failed of passage. This would have substituted for the words "idiot," "non-compos," "lunatic" and "distracted person," such terms as "mentally handicapped," "feeble-minded" and "mentally ill." The principle of this



bill is generally approved and it will probably be reintroduced at the next Legislature after further scrutiny and perhaps some modification.

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Senate Bill 294, which proposed to amend chapter 233 relating to mentally irresponsible persons indicted for or acquitted of crime, likewise failed to pass. It would have changed the term "insane defendants" to read "mentally ill or feeble-minded defendants," etc. It would also have changed the present law relating to examination as to mental responsibility of persons indicted for felony. It is generally agreed that section 10,826, R. L. 1945, should be amended so as to *require* psychiatric examinations of all persons indicted for a capital offense, and of all per-

sons indicted for, or convicted of, a previous felony; to permit such examinations following the first indictment for felony; and to permit a defendant indicted for a felony to request that the court direct such psychiatric examinations. The bill is being studied further with a view to its introduction in modified form at the next Legislature.

#### SUMMARY

1. There is presented a summary of the bills pertaining to mental health introduced at the 23rd Legislature of the Territory of Hawaii, 1945.
2. The comments thereon are those of the writer.

R. D. KEPNER, M.D.

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MRS. ETHEL HILL, *Librarian*

MRS. GLADYS OHMS, *Library Assistant*

Phone 65370

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Monday-Friday—7:30 p.m.-9:30 p.m.

Closed all day on national holidays—closed at noon  
on Territorial holidays

The Library has now been organized as a corporation for scientific and educational purposes, and has been declared exempt from taxation. The Library Endowment Fund, now totalling over \$40,000, is being invested by the Bishop Trust Company. It is hoped that this fund will gradually increase through contributions from individuals or organizations, and insure the steady growth of the Library for the future. With the idea of familiarizing the entire membership with the present organization, we are publishing the By-Laws, hoping that careful reading will help to clarify any points of discussion which may arise.

Membership rules have been defined as follows:

Full library privileges are extended to all regular and honorary members of the Hawaii Territorial Medical Association and the Nurses' Association of the Territory of Hawaii. Their annual contribution to the Library Fund will be paid from their respective society dues.

Full library privileges are extended to medical officers of the armed forces and Public Health Services stationed in Hawaii upon payment of \$5.00 per annum.

Restricted or reference privileges are extended to all military medical personnel, University students and authorized research workers without payment of dues.

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## BY-LAWS

### HONOLULU COUNTY MEDICAL LIBRARY

#### A Hawaiian Corporation

#### ARTICLE I

##### MEMBERSHIP

Section 1. *General.* The Board of Governors shall have power to prescribe the qualifications of members and shall, subject to approval by a majority of the mem-

bers, fix and amend from time to time the amount of initiation fees and dues payable by the members and the terms of payment thereof. The Board of Governors may by resolution set a membership limit as to any or all classes. Unless the Board of Governors shall from time to time by resolution otherwise provide, there shall be the following classes of membership:

(a) *Honorary Members.* The Board of Governors may elect to honorary membership any of the following persons: (1) Persons who have rendered outstanding and distinguished service in the medical profession in the Territory of Hawaii or elsewhere; (2) active members of the Library corporation who have retired from the practice of medicine after long and faithful service to the corporation; (3) any active member of the Library corporation who shall become totally and permanently disabled.

(b) *Regular Members.* Regular members shall be residents of the Territory of Hawaii who are reputable and legally qualified to practice medicine and who have been elected in the manner provided herein. All regular members shall be entitled to all the privileges of the Library and shall have the right to vote and hold office.

(c) *Contributing Members.* Contributing members shall consist of persons, firms, associations, corporations and societies making annual contributions to the Library under such terms and conditions as shall be provided by the Board of Governors. Contributing members and persons duly authorized to represent said contributing members shall be entitled to the privileges of the Library under such terms and conditions as may be prescribed by the Board of Governors, but they shall not be entitled to vote or to hold office.

(d) *Service Members.* Service members shall consist of medical officers of the Army, Navy, Marine Corps, Coast Guard, Marine Hospital and Public Health Services of the United States who are stationed in Hawaii and who shall be elected in the manner provided herein. Service members shall be entitled to the same privileges as contributing members.

(e) *Student Members.* Student members shall consist of students duly enrolled in the University of Hawaii, or in any of the nursing schools of recognized hospitals in the Territory of Hawaii. Student members shall be entitled to the privileges of the Library under such terms and conditions as may be prescribed by the Governors without the payment of dues, but they shall not be entitled to vote or hold office.

Section 2. *Other Classes of Memberships.* There shall be such other classes of members and such privileges as may from time to time be determined by the Board of Governors.

## ARTICLE II

## BOARD OF GOVERNORS

Section 1. *Number of Governors.* The Board of Governors shall consist of not less than seven nor more than fifteen members who shall be elected to serve for two years, except that when the number is changed, new members shall be elected to serve for either one year or two years in such proportion that the members of the Board shall be divided equally as nearly as may be between members who are to serve for two years and members who are to serve for one year. At each annual meeting the number shall be fixed and sufficient members shall be elected so that said new members taken together with the holdover member shall equal that number. Said number may be increased and additional members elected at any special meeting held for that purpose.

Section 2. *Meetings.* The Board of Governors shall meet at such times as the Board shall determine or authorize upon such notice as the Board may by resolution determine.

Section 3. *Quorum.* Except as otherwise provided in these by-laws, a majority of the members of the Board of Governors present may adjourn the meeting from time to time without further notice until a quorum be had.

Section 4. *Vacancies and Removals.* Should a vacancy occur in the office of President or Vice President or a member of the Board, the Board, or the remaining members thereof, by majority vote may appoint a successor to fill the vacancy to serve for the unexpired term so vacated, subject to the right of the members to displace such appointee and fill the vacancy at any subsequent members' meeting. The members may by a three-fourths vote of those present at any annual meeting or at any special meeting called for the purpose remove any Governor or elected officer and elect his successor.

Section 5. *Powers of the Board of Governors.* Except as otherwise provided in the charter or by-laws, all of the corporate powers of the Library shall be vested in the Board of Governors. In furtherance thereof, and in addition to all powers in them vested or implied by any provision of these by-laws, the Board shall have power:

(a) To appoint and control and at pleasure remove (without cause except in the case of elected officers) any officers, agents and employees, and to allow such compensation for their services as to the Board shall seem proper.

(b) Consistently with these by-laws, to prescribe the duties of any officers.

(c) To appoint or authorize the appointment of such standing and other committees as these by-laws may authorize and as to the Board shall seem proper for carrying on the activities of the Library or for the conduct of its business or affairs, and to define their jurisdiction, duties and powers, provided that all committees shall be subject at all times to the control of the Board and be subject to change at the pleasure of the Board.

(d) To make and enforce rules not inconsistent with these by-laws, regulating from time to time the affairs and conduct of the Library and the conduct of its members in connection with the Library, and of other persons admitted to any of the privileges of the Library or within its precincts; and to give effect to such rules of committees as shall meet with the approval of the

Board; all as in the judgment of the Board shall seem advisable from time to time.

(e) To determine and govern all matters affecting finances, discipline, decorum and harmony.

(f) To make and authorize expenditures, and the purchase of supplies or personal property for the Library or for the use or accommodation of its members.

(g) To call special meetings of the members to consider specified subjects.

(h) To censure, suspend, request and enforce the resignation of or expel any member who shall be found guilty of any offense against any by-law, rule or regulation of the Library, and to drop from membership or expel any member for nonpayment of any indebtedness to the Library; and also to suspend or withdraw the privileges of the Library from any person admitted thereto for any like cause.

## ARTICLE III

## OFFICERS

Section 1. *Principal Officers.* The principal officers of the Library shall be a President, First Vice President, Second Vice President, Secretary and Treasurer, of whom the President and Vice Presidents shall be elected annually by the membership from the Board of Governors and all other officers shall be appointed by and serve at the pleasure of the Board. There shall also be an Auditor (or Auditing Committee) who shall be appointed by the Board. The Treasurer may be a corporation.

Section 2. *Other Officers.* There may be such other officers and agents of the Library as the Board of Governors may deem appropriate and appoint, all of whom shall serve during the pleasure of the Board and none of whom shall be deemed members of the Board of Governors by reason of their appointment as such officer or agent.

Section 3. *The President.* The President shall be the general executive officer of the Library and shall have general supervision over its business and affairs and see to the proper observance and enforcement of all by-laws, rules and regulations of the Library and any action or orders of the Board. He shall preside at all meetings of the members and of the Board of Governors; he shall call such meetings of the members and of the Board of Governors as are herein provided for and such other meetings as shall seem required; he shall render at the annual meeting of the members a written report on the affairs of the Library during the previous year, he shall sign, with the Treasurer, all contracts, bonds and other instruments in writing to bind the Library which shall first have been approved or authorized by the Board of Governors.

Section 4. *The Vice Presidents.* The Vice Presidents shall assist the President in the performance of his duties and during the absence or disability of the President, the First Vice President shall have all the powers of the President. In the absence or disability of both the President and the First Vice President, the duties of the President shall be performed by the Second Vice President.

Section 5. *The Secretary.* The Secretary shall give notice of all meetings of the members and of the Board of Governors and shall keep the minutes of such meetings; he shall conduct all correspondence except that re-



quired to be attended to by the Treasurer; he shall furnish the Treasurer with the names of all persons elected to membership or admitted to the privileges of the Library; keep the membership roll of the Library, and shall be the keeper of the corporate seal if any be adopted; in the absence or disability of the Secretary, a temporary Secretary shall be chosen by the Board of Governors who, while he shall remain in office, shall exercise all the powers and be subject to all the obligations of the regular Secretary; he shall also attend to such other duties as may be required of him by the Board.

Section 6. *Treasurer.* The Treasurer shall collect all sums due the Library and deposit the same in the name of the Library at some bank to be designated by the Board of Governors. He shall disburse all funds under the direction of the Board of Governors and conduct all correspondence in relation to the same. He shall sign, with the President, all contracts and all instruments in writing requiring execution in behalf of the Library; he shall cause all the business and financial transactions of the Library to be properly recorded on the books of the Library, which at all times shall be open to inspection by all members of the Board of Governors and the Auditor or Auditing Committee. He shall render an annual statement to the Board of Governors showing receipts and expenditures in money and giving an account of all funds, notes, bonds, securities, accounts and evidence of property and indebtedness of the Library entrusted to his custody. In the absence or disability of the Treasurer, a temporary Treasurer shall be chosen by the Board of Governors, who, while he shall remain in office, shall exercise all the powers and be subject to all the obligations of the regular Treasurer; he shall also attend to such other duties as may be required of him by the Board.

Section 7. *The Auditor or Auditing Committee.* It shall be the duty of the Auditor (or the Auditing Committee, if appointed) to examine all books, accounts, vouchers, balances, securities and evidences of property of the Library and report to the Board at such time and for such purposes as the Board may require and to make a full report to the members of the Library at the annual meeting.

## ARTICLE IV

### MEETINGS

Section 1. *Annual Meeting.* The annual meeting shall be held in January, February, March or April at a time which shall be fixed by the Board of Governors or the President. At the annual meeting or at any regularly adjourned session thereof, any business, ordinary or extraordinary, may be transacted except as otherwise expressly provided herein.

Section 2. *Notice of Annual Meeting.* Notice of the annual meeting shall be mailed to every regular member ten days in advance of such meeting, postage prepaid, addressed to him at his address as it appears in the membership rolls of the Library, except that upon prior authorization of the Board of Governors or the President, given to the Secretary, notice may be given by publication in any newspaper of general circulation, such publication to appear not less than ten days in advance of such meeting.

Section 3. *Special Meetings.* Special meetings of the members may be held at any time upon call of the President or upon call of any three Governors or upon the written request of any twenty members, provided that notice shall be given in the same manner required for the annual meeting, except that the notice shall state briefly the business proposed to be transacted or considered thereat.

Section 4. *Quorum and Voting.* Each regular member present in person or by proxy shall be entitled to one vote. A quorum shall consist of not less than fifteen regular members present in person or by proxy. Unless limited by its terms, a proxy or written authorization shall continue effective until the same shall be revoked by written revocation filed with the Secretary.

## ARTICLE V

### MEMBERSHIP

Section 1. *Candidates.* The application of each person proposed for membership shall be delivered to the Secretary in such form as the Secretary shall prescribe.

Section 2. *Election.* The Board of Governors may grant, defer or reject any application. If there are three votes opposed to the motion for election, the application shall be considered withdrawn.

Section 3. *Resignations and Expulsions.* All resignations must be made in writing to the Secretary and no resignation (except it be called for by the Board of Governors) shall be accepted from any member who shall in any way be indebted to the Library. Any member may be suspended or expelled for nonpayment of obligations in the manner hereinafter provided and may be suspended or expelled for wilful infractions of any by-law or committee ruling or for acts of conduct which may be deemed disorderly or injurious to the interest of the Library by an affirmative vote of five of the Board of Governors, provided that at least one week's notice in writing shall be given to the member, together with a copy of the charges preferred against him and an opportunity afforded him for a hearing before the Board of Governors or a committee thereof.

## ARTICLE VI

### FEES, DUES AND ASSESSMENTS

Section 1. *Fees, Dues and Assessments to be Fixed by Vote.* Fees, dues and assessments shall be fixed by the Board of Governors by resolution duly entered upon the minutes of the Board and be subject to change in like manner from time to time provided that increases in dues after initial adoption of schedule of dues shall not take effect until at least thirty days after notice thereof shall have been given by mail to the members. In cases of persons other than members admitted to the privileges of the Library, charges may likewise be made for entrance fees, dues or other purposes as the Board shall in like manner determine from time to time. It shall be the policy of the corporation to permit the public to use the Library in such manner as not to lessen its benefits to those qualified to obtain the greatest value from its use and with such restrictions as may be necessary to preserve quiet and order.

## ARTICLE VII

## COMMITTEES

Section 1. *Standing Committees.* The standing committees of the Library shall be the Library Committee, the Nominating Committee and the Finance Committee. There shall be such other committees as the Board of Governors shall from time to time deem proper for carrying on the activities of the Library or for the conduct of its business or affairs, the duties, jurisdiction and powers of which shall be defined by the Board of Governors.

Section 2. *The Library Committee.* The Library Committee, consisting of such number as the Board of Governors shall determine, shall have charge of the maintenance and operation of the Library grounds and physical property of the corporation and shall from time to time with the approval of the Board of Governors promulgate and publish such rules and regulations as it shall deem necessary or proper in carrying out its duties.

Section 3. *The Finance Committee.* The Finance Committee shall consist of three members, one of whom shall be the Treasurer or a representative of the Treasurer, shall prepare budgets, make forecasts of income and make recommendations to the Board of Governors from time to time on all matters concerning the finances of the corporation and shall carry out such other duties as the Board of Governors shall prescribe.

Section 4. *The Nominating Committee.* The Nominating Committee shall consist of such number as the Board of Governors shall determine, and shall at each annual meeting and at any special meeting at which officers or Directors are to be elected, place in nomination the names of persons that the Committee recommends for the office to be filled.

## ARTICLE VIII

## AMENDMENTS

Section 1. These by-laws may be altered, amended, repealed, or added to at any annual meeting or at any special meeting of the corporation called for the purpose upon an affirmative vote of not less than two-thirds of the regular members present at said meeting (unless a greater number is required by the provisions of law) provided that written notice of the subject matter of every proposal shall be given to the Board of Governors and posted on the Bulletin Board of the Library at least fifteen days preceding said meeting.

## CERTIFICATE

The undersigned incorporators and Secretary of HONOLULU COUNTY MEDICAL LIBRARY certify that the foregoing by-laws of the corporation have been duly adopted as the by-laws of the corporation on the 30th day of January, 1945.

Signed NATHANIEL M. BENYAS (SEAL)  
 PAUL WITHINGTON (SEAL)  
 FRANCIS J. HALFORD (SEAL)  
 ROGERS LEE HILL (SEAL)  
 HENRY C. GOTSHALK (SEAL)

Attest:

ROGERS LEE HILL, *Secretary*

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## NOTES AND NEWS

### IN MEMORIAM

ZEN SATO, M.D.....January 5, 1946

WALTER S. CHINN, M.D.....January 9, 1946

### PERSONALS

DR. CHARLOTTE MELLER has left the Territorial Hospital at Kaneohe to practice neurology and psychiatry in Honolulu. Her offices are in the Young Building.

Besides the enlarged physical plant the staff and directors of the St. Francis Hospital are planning the expansion of their house personnel to include internes. At the present time DR. ALEXANDER LEE, DR. LESLIE VASCONCELLES and DR. EDWIN KAU are resident physicians. DR. KAU has recently returned from Shanghai, where he taught orthopedic surgery. A provisional teaching staff has been organized, with DR. L. A. R. GASPAS as chief of the surgical service, DR. A. S. HARTWELL as chief of the medical service and DR. H. E. BOWLES as chief of the gynecologic and obstetric service; each is to serve for a three-year term.

On December 30, 1945, DR. AND MRS. GILBERT HALPERN welcomed the arrival of a daughter at The Queen's Hospital.

DR. CLIFFORD KOBAYASHI left in January to accept a residency in pediatrics with Dr. Jeans at the University of Iowa.

DR. CHARLOTTE FLORINE has returned to Honolulu and to the Medical Group after a two month vacation with her family in Iowa.

DR. WILLIAM JOHN HOLMES has just welcomed his wife and infant son, Charles Thomas, who flew from Mexico where the baby was born.

Maui reports that DR. THOMAS COWAN is back at Kahului, DR. E. H. ANDERSON is at Haliimaile and DR. JAMES FLEMING can be reached at Wailuku.

DR. HAWLEY H. SEILER, formerly of Maui and Molokai, writes that he would be more than glad to see any friends from Hawaii who may visit the Mayo Clinic. His present address is 908

Fifth Street, N. E., Rochester, Minnesota. He seems to be greatly enjoying his three year fellowship in surgery.

### Health Department

DR. LEO BERNSTEIN, board of health county health officer on Hawaii, has gone to the mainland to spend his terminal leave from the U. S. Public Health Service. He will return to his former position with the health department in May of this year.

DR. WILLIAM R. MURLIN of New York has joined the territorial health department as survey physician in the tuberculosis bureau. DR. MURLIN is a senior assistant surgeon with the U. S. Public Health Service and is on field duty with its tuberculosis control division. During the past three years, he served as acting director of the tuberculosis control division of the Oregon state health department, and was in charge of a case-finding x-ray unit for a year.

With the departure of senior assistant sanitarian ARVE H. DAHL of the U. S. Public Health Service, DAVID D. BONNET, Ph.D., was appointed acting director of the mosquito control division of the board of health. DR. BONNET is an entomologist with the U. S. Public Health Service. Before joining the public health service in November, 1943, DR. BONNET was an instructor in zoology at the University of Hawaii for two years.

The Child Guidance Clinic of the Bureau of Mental Hygiene of the board of health has added to its clinic team WALTER MASON MATHEWS, Ph.D., of the University Psychological Clinic. For the last three and a half years, DR. MATHEWS has been serving with the Navy as a clinical psychologist assigned to the Neuropsychiatric Section of the Bureau of Medicine and Surgery. During this tour of duty, he was Senior Psychologist at the U. S. Naval Training Center at Bainbridge, Maryland, and Senior Psychologist with the U. S. Naval Hospital at the National Naval Medical Center, Bethesda, Maryland. Before entering the Navy, DR. MATHEWS was the Chief Psychologist at the Guidance Center of the Institute of Mental Hygiene in New Orleans.



Four public health nurses, MRS. GENEVIEVE SCHEY, MISS SARA LEE EDWARDS, MISS WILDA B. FULTON and MRS. NANCY K. CHING, joined the board of health nursing staff last month. Miss EDWARDS and MISS FULTON are from New York City and San Francisco, respectively. MRS. SCHEY and MRS. CHING, who were with the local health department previously, have recently returned from Minneapolis, Minnesota, and Cheyenne, Wyoming.

### NEWS

St. Francis Hospital celebrated the opening of their new makai wing on Sunday, February 17, with an open house. The new facilities include 8 operating rooms and 65 beds, 47 of which are obstetrical. The new beds will relieve much of the congestion in the hospital, and will make room for a larger occupational therapy department. This addition brings the hospital capacity to 165 beds and 42 bassinets.

DR. NORMAN SLOAN and the Board of Hospitals and Settlement have approved a program whereby internes from The Queen's Hospital may spend a month of their interne service at the Kalaupapa leprosy settlement. This will represent in most cases an alternative to a month on a plantation.

Early in February, just before the influenza epidemic, the Children's Hospital opened ten new cribs just off the annex, bringing their total bed capacity to 86. It is anticipated that the rotation of naval internes through the Children's Hospital will cease about June, 1946. Their help has been invaluable during the expansion of facilities at this hospital.

In place of the usual Thursday morning Queen's Hospital Clinics, the Honolulu doctors have recently had the privilege of being addressed by two outstanding scientists. On February 14 DR. FRANK WANG CO-TUI reported on recent advances in the use of amino acids for the treatment of various conditions. Our doctors showed particular interest in what was said about Amigen for peptic ulcers. DR. CO-TUI is Associate Professor of Experimental Surgery at New York University. Considerable publicity has recently been given to the experimental work with amino acids in which he was engaged at Bellevue Hospital in New York City. He stopped briefly in Honolulu en route to China by plane. DR. GEORGE O. BURR, Professor of Biochemistry at the University of Minnesota, discussed the latest developments in the vitamin field on February 21.

### Chauncey D. Leake Lectures

On May 3 and 6-17, 1946, Chauncey D. Leake, vice president and dean of the University of Texas Medical Branch at Galveston, will give a series of nine lectures dealing chiefly with recent advances in practical pharmacology, under the auspices of the Honolulu County Medical Society. Subjects to be dealt with will include factors controlling drug action, drugs used for diagnosis, chemotherapy and antibiotics, and drugs used for alleviation of symptoms of disease with reference to the autonomic nervous system, the central nervous system, and the cardiovascular system.

Professor Leake graduated from Princeton in 1917, at twenty, and the University of Wisconsin granted him a Master of Science degree in the same year. He then spent nearly two years in the Chemical Warfare Service, following which he returned to Wisconsin as an instructor in physiology, and received the degree of Doctor of Philosophy in Physiology at that institution. From 1923 to 1928 he was assistant professor of pharmacology there; and in that year he went to the University of California to organize and head a new department and laboratory of pharmacology there. In 1942 he left California to assume his present post at the University of Texas. He has contributed extensively to the fields of anesthesia, chemotherapy, the history of science, and the philosophy of medicine.

The first lecture of the series will be given before the Friday evening session of the fifty-sixth annual meeting of the Hawaii Territorial Medical Association, on May 3. The eight remaining lectures will be given at 4:30 p.m. on Monday, Tuesday, Thursday and Friday afternoons of two consecutive weeks, starting May 6 and ending May 17. Visits to Kauai, Maui and Hawaii are also planned. There is no fee charged to members of the Society for attendance at these lectures.

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### Medical Texts to Philippine University

JOHN D. WILLIAMS  
Navy Correspondent

In a move to supply badly needed medical texts to the University of the Philippines, members of the Honolulu County Medical Society have generously donated over a thousand volumes from their personal libraries.

The plea for medical books and periodicals was raised by Lt. Comdr. George F. Hoppe of Squadron VR-11, Naval Air Transport Service, who has

been voluntarily gathering books of every description for the Philippine Educational system. In his one-man campaign to arouse interest, Lt. Comdr. Hoppe, a former Minnesota school superintendent, suggested the need of medical texts to Dr. Morton E. Berk of Honolulu.

Dr. Berk was immediately interested and with the aid of Dr. Nils P. Larsen, President of the Honolulu County Medical Society, members were invited to donate any of their unused texts or periodicals.

The response was excellent. In a week's time, a half-ton of medical knowledge was accumulated in the lobby of Queen's Hospital, Honolulu.

Lt. Comdr. Hoppe gathered the medical volumes and dispatched them to the Medical School of the University of the Philippines aboard NATS planes not fully loaded for flight.

According to Philippine educational authorities it will be another decade before enough books are supplied to meet standard needs, so the Honolulu County Medical Society book-collection continues.

### Book Reviews

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1944, with the Comments That Have Appeared in The Journal. Cloth. Price, \$1. Pp. 238, with 50 illustrations. Chicago: American Medical Association, 1945.

This is a fascinating and informative volume. The section on Pathogenic Bacteria, Rickettsias and Viruses as Shown by the Electron Microscope alone is worth twice the price of the book. Another section, dealing with the subject of local treatment of thermal cutaneous burns, is a valuable up-to-date review of this important subject.

The volume includes a note on the history of the Council, reports of several preparations withdrawn from the current issue of *New and Non-official Remedies*, and — oddly enough — not a single account of a product found unacceptable by the Council!

The book can be warmly recommended for either information or entertainment, or both.

### New Journals

#### *Quarterly Review of Pediatrics*

The publication of a journal of abstracts of publications relating to pediatrics is announced by the Washington Institute of Medicine. The review, which will be published quarterly, is to be under the direction of Dr. Irving J. Wolman, of the Children's Hospital, Philadelphia, Pennsylvania. There is an editorial board consisting of sixteen prominent American and Canadian pediatricians. Each number will be thoroughly indexed, with a cumulative index in the final (November) issue of each calendar year. Book reviews, as well as abstracts of periodical articles, will be included.

The venture apparently corresponds fairly closely to the well-known and valuable "year-books" which have been published annually for the past fifteen years or so in each of twelve different medical fields, including pediatrics. Aside from the fact that the new Review is to be published quarterly, and will perhaps be more nearly all-inclusive, it is difficult to see how it will avoid reduplication of the efforts of the Year Book Publishers and the Drs. Abt. None the less, the *Quarterly Review of Pediatrics* will probably be a popular and useful reference work for both general practitioners and pediatricians.

Address communications to Irving J. Wolman, M.D., Editor-in-Chief, The Children's Hospital, 1740 Bainbridge Street, Philadelphia 46, Pa.

### Prize Essay Contest

The American Association of Obstetricians, Gynecologists and Abdominal Surgeons Foundation announces that the annual prize contest will be conducted again this year. For information address: Dr. James R. Bloss, Secretary, 418 Eleventh Street, Huntington 1, West Virginia.

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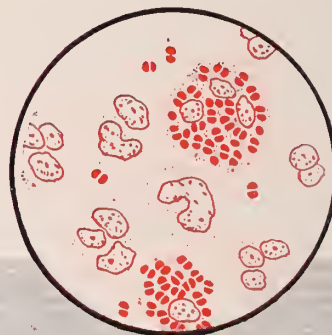
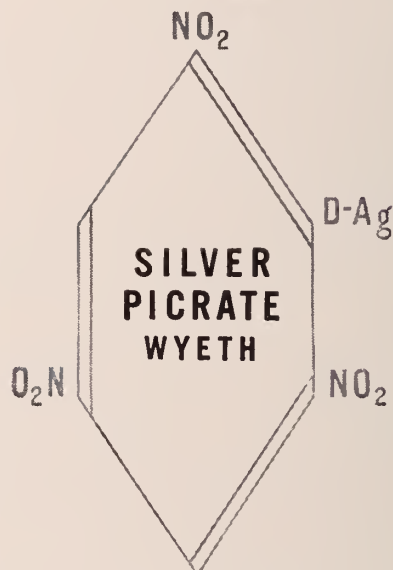
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# INTER-ISLAND NURSES' BULLETIN

*Official Publication of the Nurses' Association, Territory of Hawaii*

ETHEL H. BROWN, R.N., *Executive Secretary*

*Bulletin Committee*

VIRGINIA M. DOYLE, R.N.  
EVA E. PEYTON, R.N.  
ERMA BURGESS, R.N.  
HELEN GAGE, R.N.

*Island Reporters*

HAWAII: THELMA M. PATTEN, R.N.  
MAUI: BETSY BOYLIN, R.N.  
KAUAI: THELMA HENSLEY, R.N.

## REPORT OF THE EXECUTIVE SECRETARY

ARLENE THOMPSON, Educational Director of Children's Hospital, has been appointed by Governor Stainback to the Board of Registration of Nurses. MRS. THOMPSON replaces MARGERY MACLACHLAN.

SISTER MARY ALBERT, Director of Nursing at St. Francis Hospital, has been appointed to the Board of Trustees of the Territorial Nurses' Association to replace MARGERY MACLACHLAN.

We have received a supply of application forms from the Professional Counselling and Placement Service, Inc., of the American Nurses' Association. This service is of special value to nurses seeking employment outside the Territory. Any nurse interested in having her credentials on file in this National Bureau may obtain an application from the Executive Secretary. This counselling and placement service is provided, without charge, by the American Nurses' Association.

As this goes to press the plans for the fifteenth annual meeting of the Nurses' Association, Territory of Hawaii, on March 21 and 22 in the Mabel Smyth Building are as follows:

The meeting will carry as its theme "Any Lasting Reform in Nursing Must be Made by Nurses." On the first day of the meeting, registration and the business meeting will start at 9:00 a.m. HAZEL MATTSON, the President, will preside. At 11:00 a.m. that morning VIRGINIA JONES, Chairman of the Nursing Activities Committee, Hawaii Chapter, American Red Cross, will speak. In the afternoon there will be a panel of speakers on nursing education, led by ARLENE THOMPSON, Chairman, Educational Committee. Nursing education, postgraduate study, nursing schools, student recruitment program, and the Nurse Practice Act and practical nurses will be discussed. To conclude this part of the

program The Queen's Hospital movie "Student Nurse" will be shown.

On the morning of March 22 JANICE MICKEY will lead a panel, "Public Health Nursing in Action," discussing the Board of Health nurse, industrial nursing, plantation visiting nurse, and school nursing. Following this, with ALBERTINE SINCLAIR as chairman, will be a panel of talks on opportunities in nursing, office nursing, industrial nursing, and private duty nursing.

In the Alice Yates Room of the Mabel Smyth Building a buffet luncheon will be served on the first day of the meeting, and a buffet supper at 6:00 p.m. on the last evening.

## NURSING SERVICE BUREAU REPORT

Active private duty membership in the Nursing Service Bureau is now 85. Membership is slowly but steadily increasing as more nurses arrive from the mainland.

Forty-one permanent placements have been made through the Bureau since December, 1945.

The Nursing Service Bureau is anxious to assist the private duty nurses to return to an eight hour schedule. This group of nurses has worked a twelve hour schedule for four years, and many are breaking in health and morale. In spite of the shortage of nurses we believe that more nurses will be willing to return to work on an eight hour basis, and are sure that the patient will receive better nursing care.

New rates for private duty nurses, effective February 15, 1946, are:

\$ 9.00 for straight 8 hour duty  
13.50 for straight 12 hour duty  
1.15 per hour for emergency overtime  
10.00 for 8 hour contagion  
11.00 for 8 hour mental and alcoholic  
1.50 per hour for emergency overtime  
Hourly Nursing:  
\$ 2.50 for first hour  
.75 per 1/2 hour thereafter

## NEWCOMERS

NAME	FROM	TO
ADAM, HELEN	St. Paul, Minn.	Olaa, Hawaii
BATES, MARY ELIZABETH	Winston-Salem, N.C.	Queen's Hospital
BARTH, AILEEN	Los Angeles, Calif.	Queen's Hospital
BAUDER, FLORENCE	Denver, Colo.	Children's Hospital
BEATY, ELIZABETH	San Francisco, Calif.	Kapiolani Hospital
BEADLE, JOAN	New York	Queen's Hospital
BECKMAN, MARIE	St. Paul, Minn.	Olaa, Hawaii
BLACK, RITA	New York	Queen's Hospital
BORLANG, EILEEN	Los Angeles, Calif.	Queen's Hospital
BROWN, ELIZABETH	New York	St. Francis Hospital
BUSH, GRACE	New York	Queen's Hospital
CARTWRIGHT, SHIRLEY	New York	Queen's Hospital
COPLIN, ELEANOR	El Cerrito, Calif.	Kapiolani Hospital
DAVIS, PAULINE	Nashville, N.C.	Queen's Hospital
DOCKERY, LEONA	Bisbee, Ariz.	Queen's Hospital
DUBOIS, VIRGINIA	Portland, Ore.	Queen's Hospital
EVANOFF, NADINE	Akron, O.	Olaa, Hawaii
GENTA, MARY	Denver, Colo.	Children's Hospital
GIDDINGS, MARILYN	St. Paul, Minn.	Children's Hospital
GRICE, LELA	Detroit, Mich.	Queen's Hospital
HENDRICKSON, LORRAINE	Minneapolis, Minn.	Queen's Hospital
JENKINS, LORRAINE	Detroit, Mich.	Kuakini Hospital
KUSEL, MARY	Hopewell, Neb.	Aiea, Oahu
MAGARY, FRANCES	Detroit, Mich.	Queen's Hospital
MAHLER, MILDRED	Waseco, Minn.	Children's Hospital
MILLER, CECILIA	Brooklyn, N.Y.	St. Francis Hospital
NYBORG, SIBYL	Evanston, Ill.	Queen's Hospital
O'MALLEY, NORMA	Denver, Colo.	Kuakini Hospital
PLETTNER, EVELYN	Sutton, Neb.	Puamale, Hawaii
POCHERT, RITA	Detroit, Mich.	Queen's Hospital
PRESTON, KATHRYN	Denver, Colo.	Children's Hospital
QUIGLEY, PATRICIA	Shaker Heights, O.	St. Francis Hospital
REICHERS, JEANETTE	Palo Alto, Calif.	Queen's Hospital
SHAW, MARY	Charlotte, N.C.	Kapiolani Hospital
SMITH, RUTH	Alexandria, Va.	Waipahu, Oahu
STEWART, VIRGINIA	Denver, Colo.	Aiea, Oahu
WEITZ, LELA	St. Louis, Mo.	Paia, Maui
WOOD, EILEEN	Spokane, Wash.	Shingle Memorial, Molokai

HONOLULU CITY AND COUNTY  
NURSES' ASSOCIATION

The Annual meeting was held on January 7, 1946. Annual reports of the committees were given, and new officers elected for 1946 are:

<i>President</i> .....	ROSIE K. CHANG
<i>Vice President</i> .....	DOROTHY N. SANTOS
<i>Secretary</i> .....	HELEN GAGE
<i>Treasurer</i> .....	THELMA MCCLELLAN
<i>Trustees</i> .....	JESSIE EYMAN, ERMA BURGESS, LAURA HOOKER, MYRTLE SCHATTENBURG, VIOLET BUCHANAN, DOROTHY BLANK

VIRGINIA A. JONES, just returned from the Philippines where she went for the American Red Cross, gave a report on her experiences there. Miss JONES assisted in reorganizing the Nursing Service for the Philippine Red Cross.

MISS MARY CATTON, secretary for the Convalescent Nursing Home, outlined the tentative plans for the Home, and MYRTLE SCHATTENBURG, chairman of the special committee of the City and County Nurses' Association to aid in this project, gave a progress report of her committee.

At the regular monthly meeting of the Association on February 4, 1946, the delegates to the Annual meeting of the Nurses' Association, Territory of Hawaii, were elected. The new officers and trustees were introduced and new committee members announced. A reception was held in the Alice

Yates room following the meeting, for the new committees.

Applications for membership have been revised to include more information needed for reports and files.

The Industrial Section now has a membership of twenty-four, and hopes to interest the industrial nurses on the other islands to form sections.

The Private Duty Section has elected CLARA CHING, chairman, MARGUERITE SIEBERT, vice-chairman, and ESTHER ARAMAKI, secretary, as officers for 1946.

The Private Duty Section requested the Board of Trustees, Honolulu City and County Association, to make a request on their behalf to the Board of Trustees, Nurses' Association, Territory of Hawaii, for a raise in rates for the private duty nurses, and for support in their attempt to return to eight hour duty. This request was accompanied by the following study:

<i>Personnel</i>	<i>Wages per month</i>	<i>Hours per week</i>
Public Health staff duty .....	\$202.50	44
Office nurses .....	185.00 average	44
Industrial nurses .....	225.00	44
Staff duty: Leahi, Children's * and Kapiolani Hospitals ....	200.00	48
Staff duty: Queen's, St. Francis and Kuakini Hospitals ..	190.00	48

Note: Hospital staff nurses have an opportunity to purchase board, room and laundry for \$50.00 per month.

Private duty nurses asked for consideration on the following points:

1. An hourly rate on a par with the office nurse and the public health nurse who have the same living expenses.
2. They are required to pay a gross income tax of 1½% over and above taxes paid by all other groups of nurses.
3. They have no vacation or sick leave with pay, no health insurance or retirement plans.
4. They want to work an eight hour day the same as other groups.
5. Many private duty nurses, now inactive, have expressed their desire to return to work if these requests are granted.

The following information was prepared for members and prospective members, by the Membership Committee:

*What Do You Get for Your Twelve Dollars Dues to the Nurses' Association, City and County of Honolulu?*

1. Membership in the Territorial Nurses' Association, transferable anywhere in the United States, and membership in the American Nurses' Association.



2. Current year's subscription to the HAWAII MEDICAL JOURNAL which includes the *Inter-Island Nurses' Bulletin*, the official publications of the Territorial Medical Association and the Territorial Nurses' Association, respectively.
3. Group action for the improvement of wages, hours, and personnel policies for nurses.
4. Eligibility for membership in the Nursing Service Bureau in order to engage in private duty nursing.
5. Eligibility for loans from the Margaret Jones Memorial Fund for further education, or for relief in case of need.
6. Eligibility for membership in the National League of Nursing Education.

The City and County Association is composed of registered nurses. It is administered by registered nurses for registered nurses. You, the individual member, by democratic process, elect its officers and directors, and take action on its by-laws. Your professional needs, within the budget limitations imposed by your payment or non-payment of dues, determine the program of the Nurses' Association, and the rate of its progress toward the goals you have set.

JOANNE MUSIAL became the Director of Nursing Service at Kapiolani Hospital on February 1, 1946. She is a graduate of St. Francis School of Nursing, Colorado Springs, Colorado. Miss MUSIAL had a postgraduate course in obstetrics at New York Lying-In Hospital, and took her B.S. degree in Nursing Education at the San Francisco College for Women in 1945.

#### KAUAI COUNTY NURSES' ASSOCIATION

The Kauai Nurses' Association elected the following officers for 1946:

President.....	THELMA HENSLEY
1st Vice President.....	MABEL WILCOX
2nd Vice President.....	SHINO MURAKAMI
Secretary.....	TSUGIE NISHIMURA
Treasurer.....	JOSEFINA CORTEZAL
Directors.....	MATTIE CONEY, CLAIRE CARRA

Five nurses from the mainland joined the staff of the G. N. Wilcox Memorial Hospital in December. LILLIE CATOE and SARAH FUNDERBURG are from South Carolina and ELLEN OLSON, HELEN DULK and MARGARET SNYDER are from Mercy Hospital, Denver, Colorado. These nurses were most welcome to the much depleted staff.

STEPHANIE FOTO, anesthetist and surgical supervisor, left for the mainland, and MARIE KIDO, staff nurse, left to join the staff of Hilo Memorial Hospital. CLARA CHALMERS, of Makaweli, relief nurse for nine months during the desperate short-

age of nurses, has resigned. We regret the loss of such splendid nurses.

KAY OISHI has resigned her position as School Nurse at the Kapaa School to join the nursing staff of The Clinic in Honolulu.

KATHERINE BURSO has left Mahelona Hospital to join the nursing staff of Puumaile Hospital, Hilo, Hawaii.

#### NURSING CARE STUDY OF HEMORRHOIDECTOMY

BESSIE TAKAESU\*

K.F., a 24 year old Hawaiian crane operator, was admitted on February 8, 1945, and discharged on February 14, 1945.

Ward or Service: Liholiho I—Men's Surgical.

Final Diagnosis: Small bleeding internal hemorrhoids.

##### SOCIAL BACKGROUND

The patient is courteous, well mannered, and appreciative, the youngest in a family of six children. He was born on July 6, 1921 in Honolulu. When Mr. F. was eight years old, his father obtained a divorce, leaving his mother to care and provide for the six young children. As a youngster he had always wanted to travel, but had not been able to pursue his interest because of the trying conditions which his family was experiencing. He managed to attend high school by working on odd jobs on a part-time basis, hoping that in this way he would be able to shoulder some of the responsibilities which his mother had been assuming. He graduated in 1941; three months later Mr. F.'s mother became ill, and shortly after she expired.

At present Mr. F. is living with his brothers and sisters and he is employed at the Pearl Harbor Navy Yard as a crane operator—a job which he has had since 1942. Home conditions appear to be satisfactory according to his conversation. He seems to be entirely devoid of financial concern or worry of any sort, as he has been granted twenty-three days of sick leave with an accumulating compensation. Mr. F.'s interests are his home and his hope some day to visit the mainland United States, South America, China, France, and Italy.

##### HEALTH BACKGROUND AND MEDICAL HISTORY

Mr. F. has had no serious illnesses except for tonsillitis when five years old, shortly following which a tonsillectomy was done. He was perfectly well until February 7, 1945, when he awoke and discovered some bleeding from his rectal region.

The differentiation of hemorrhoids from other swellings of the anus is not difficult, and is based upon visual, digital, and proctoscopic examination, and a history.

A physical examination showed Mr. F. to be well nourished, well developed, and not acutely ill. His physical findings were negative except for slight anal bleeding. A routine urinalysis was done. The return reports of the test did not show any great deviation from the normal.

A hemorrhoidectomy was performed on Mr. F. on the day after admission to the ward.

Diagnosis: Small bleeding internal hemorrhoids.

\* Freshman student, Queen's Hospital School of Nursing.



## NURSING CARE AND THERAPY

The treatment and nursing care is directed toward preventing urinary retention wound infections, hypostatic pneumonia, observing and reporting the very first symptoms of any of these conditions, watching for hemorrhage, and preventing physical discomfort and unrest, providing adequate rest, fluids, fresh air, and giving health instructions as to his future care and convalescence.

On the night of admission, the day before the operation, a cleansing enema was given to clean the lower bowel. He received amytal grains 3 at bedtime to insure sleep. Amytal is relatively safe, as it has no after effects. Mr. F. slept very well. A local preparation was done in the early morning. Breakfast was withheld—fluids were also withheld for about twelve hours before operation was done, to prevent vomiting during anesthesia in surgery. Mr. F. was encouraged to void so that his bladder would be empty. Mr. F. was given a general picture of the proceedings he would encounter in surgery. This little talk enabled him to overcome some of the uncertainties that were in his mind. Morphine sulphate grains  $1/4$  and atropine sulphate grains  $1/150$  was administered hypodermically as a basal anesthetic to produce sleep preoperatively. The hypnotic effects are due to morphine—atropine checks the mucous secretions stimulated by morphine.

In surgery, Mr. F. was given a general anesthetic and the hemorrhoidectomy was done. In less than two hours he was returned on a guernsey to the floor. His pulse was rapid and strong, 118 per minute; his respirations were 22 per minute. His general appearance and condition seemed satisfactory—his face was flushed, but this was not alarming—it was due to the ether reaction. Side rails were applied for safety. Gradually Mr. F. began to exhibit symptoms of recovery through the various stages of ether anesthesia in a reverse order. His diaphoresis was profuse, so it was necessary to have his gown changed frequently to keep him dry and to prevent chill. Upon complete reaction, his chief complaint was a generalized pain. Pillows were placed under Mr. F. for comfort; his position was frequently changed; and his back carefully rubbed to prevent backache and pain. Morphine sulphate grains  $1/4$  and atropine sulphate grains  $1/150$  was given subcutaneously for pain.

On his first post-operative day it was necessary to have Mr. F. catheterized. He had been encouraged to take large amounts of fluid and he adhered to this advice very conscientiously. His first voiding was possible only when he stood up at the bedside. Throughout his post-operative days his pads were observed closely for any excessive bleeding. Fortunately only slight amounts of bloody drainage were present, and occasional changing of pads kept the area clean and dry. As to his diet, Mr. F. had tea, water, and broth after surgery. On his first post-operative day he had a full liquid diet. This type of diet will enable his lower bowel to rest and heal, and will prevent the formation of solid stools and peristalsis that would be apt to cause pain and irritation in the operative area. He enjoyed a low residual house diet on his fourth post-operative day with which he was given two teaspoonfuls of mineral oil after each meal. The mineral oil lubricates the intestinal tract and

makes for softer stools, thereby causing an easy and painless evacuation.

Mr. F.'s condition was exceptionally good. His bleeding had lessened considerably and he was allowed to walk. His graphic sheet presented a normal temperature curve, the highest elevation being 100 degrees on his third post-operative day. On the morning of his discharge—his fifth post-operative day—he was given an enema to evacuate his bowel. This he appreciated very much.

In general Mr. F. recovered rapidly and satisfactorily. He had lost some weight, but the loss was unnoticeable and insignificant, and was expected by Mr. F. as the result of a liquid diet. Before leaving the hospital, Mr. F. expressed his appreciation for the back rubs, the periodic shifting and fluffing of pillows, and the straightening of bed clothing.

"Now I know how comfortable I could be if I had a pillow under my stomach when I am lying on my side, or one under my knees when lying on my back. And you know," he added, "I am glad you asked me those questions about the Hawaiian language and customs. I would have been a sicker man if I had not had those talks with you about the Hawaiian people."

## HEALTH TEACHING

As Mr. F. appeared to be an intelligent man, many health factors and precautions concerning his condition were already known by him. However, it was important to emphasize the necessity of the anti-constipation diet as the best means for rapid convalescence.

## PLAN FOR CONVALESCENCE

Mr. F.'s plans for convalescence at home appeared very satisfactory as presented. His brothers and sisters are well employed and he has no immediate problems, social or otherwise.

## WHAT I HAVE LEARNED FROM THIS CASE STUDY

(a) First of all, I have learned a great deal about the nature of the disease itself. I believe and have found, that with good daily health practices, hemorrhoids can be prevented in a large number of people.

(b) I have realized the essential significance of good preoperative nursing care of patients who are to have hemorrhoidectomies.

(c) I have become acquainted with many excellent reference books which I had overlooked previously. I have acquainted myself more closely with the Mabel Smyth Medical Library. There I have found many more excellent and interesting books and other reading material. I have resolved to use more of these for my advantage.

(d) I have come to realize the significance of taking into sincere consideration the little things and minor gestures that take but a second to do—yet to the patient, his family, and friends, mean so much.

(e) I have learned to consider each patient as a sole individual with personal problems as well as hopes and ambitions.

(f) I have learned to create in myself a deeper respect for the religious, cultural, and educational background of patients.

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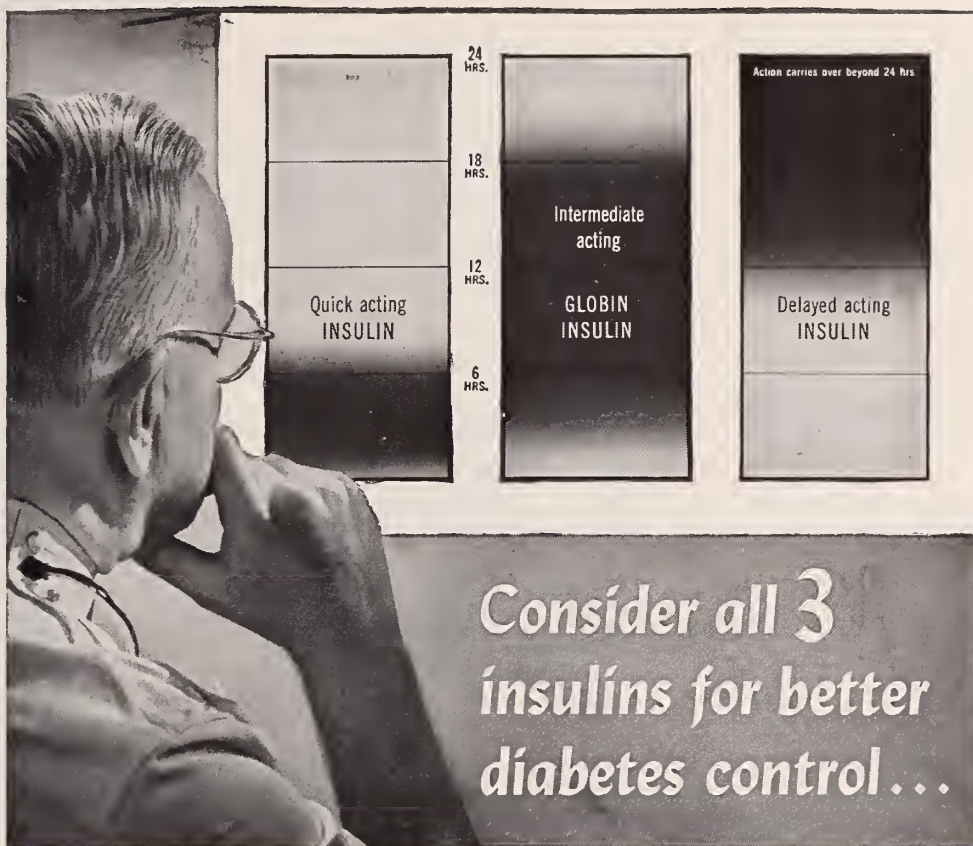
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\*Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154

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\*Davis, C. H.: Gonorrheal Arthritis Complicating Pregnancy Treated with Penicillin, *Am. J. Obst. & Gynec.* 50:215 (Aug.) 1945.

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Woltz, J. H. E., and Zintel, H. A.: The Transmission of Penicillin to Amniotic Fluid and Fetal Blood in the Human,

*Am. J. Obst. & Gynec.* 50:338 (Sept.) 1945.

Mitchell, R. McN., and Kaminester, S.: Penicillin; Case Report of a Patient Who Recovered from Puerperal Sepsis Hemolytic Streptococcal Septicemia, *Am. J. Surg.* 63:136 (Jan.) 1944.

White, R. A.: Puerperal Sepsis Treated with Penicillin, *Southern M. J.* 37:524 (Sept.) 1944.

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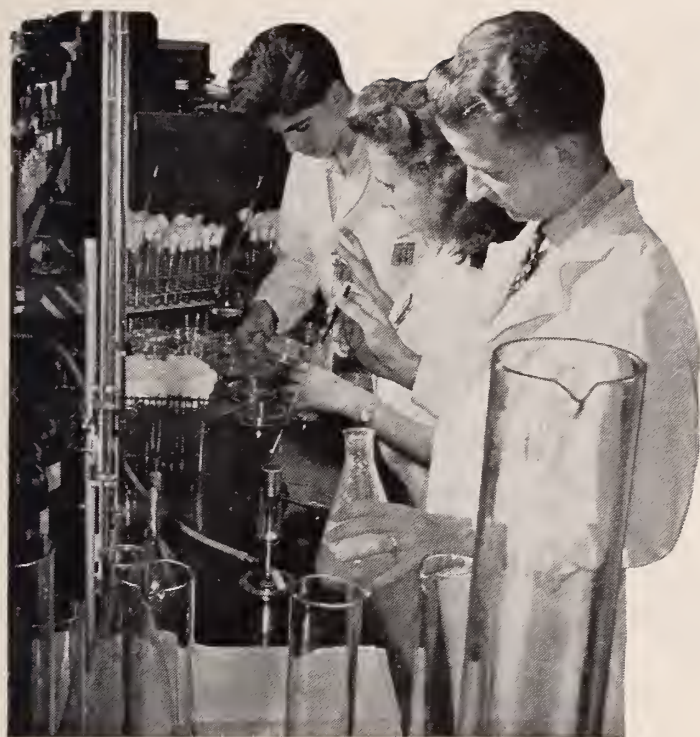
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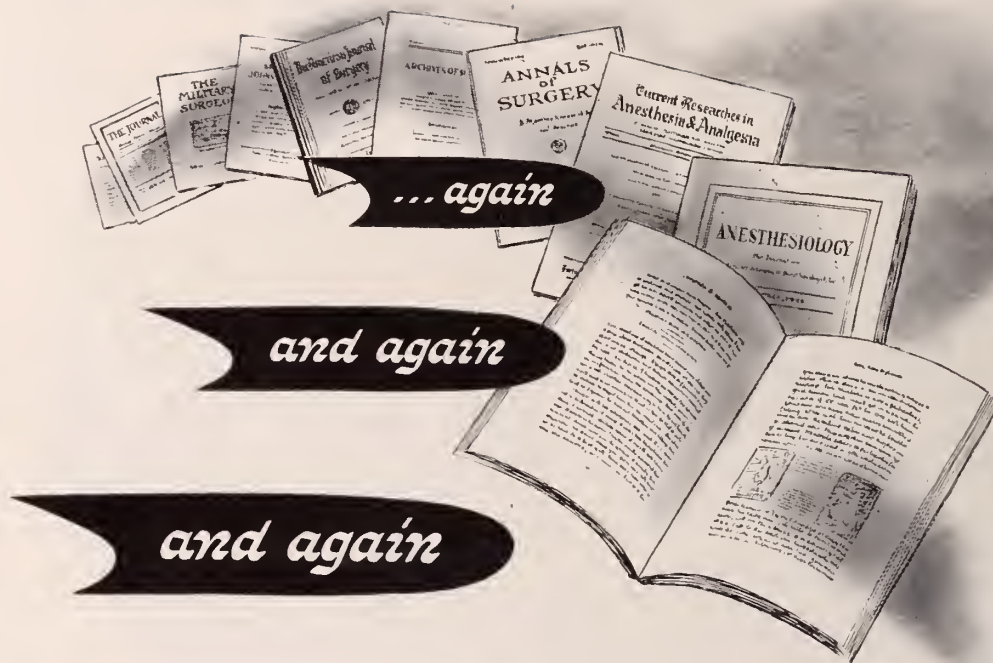
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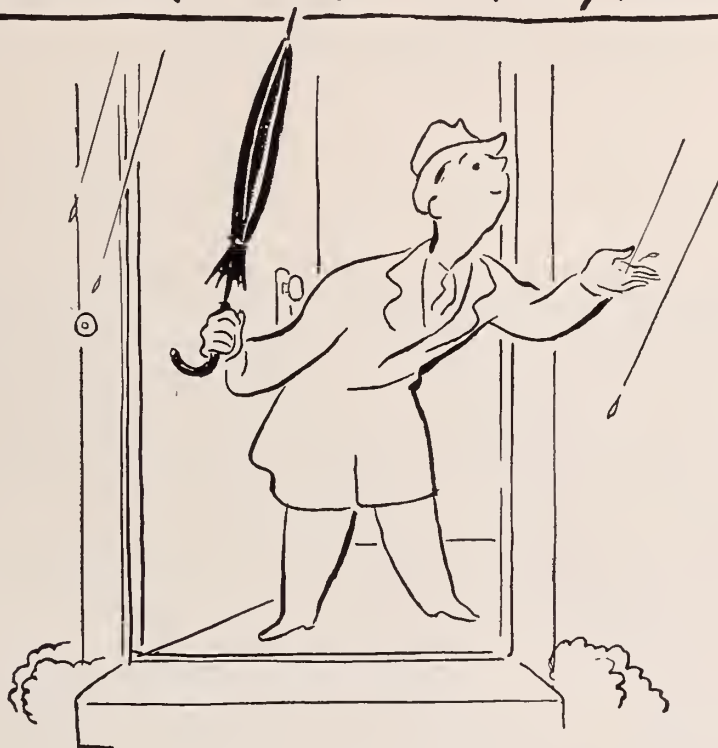
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1. Holling, H. E.; McArdle, B., and Trotter, W. R.: *Lancet* 1:127, 1944.

2. Hill, I. G. W., and Guest, A. I.: *Brit. M. J.* 2:6, 1945.

3. A Critical Study of Seasickness Remedies, No. 4, Royal Naval Medical Bulletin 24:3, 1943, abstracted, *Bulletin of War Medicine* 18:1242, 1944.

4. Lillienthal, J. L.: *J. Aviation Med.* 16:59, 1945.



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## RETICULO-ENDOTHELIAL IMMUNE SERUM

A REVIEW

CHAUNCEY D. LEAKE, Ph.D.

## BACTERIAL MUTATION UNDER PENICILLIN

I. KOJIMA, B.A., M.T.

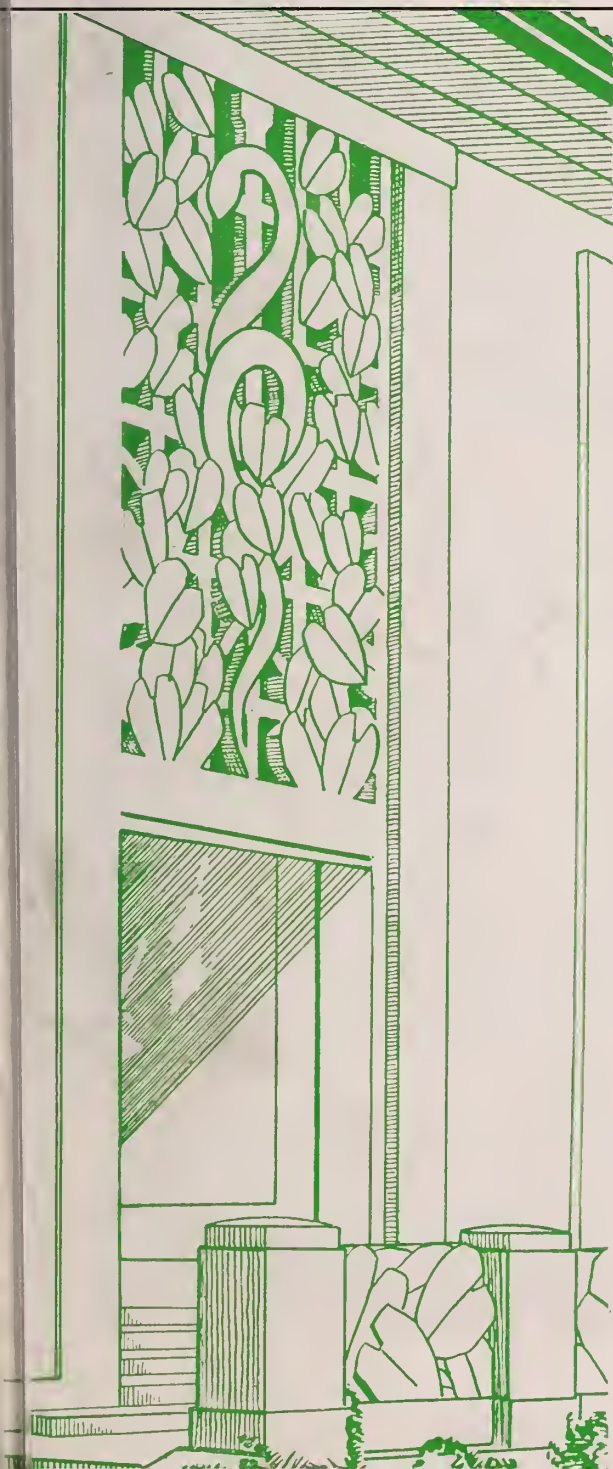
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MARY JANE HEIMBROCK, B.S., M.T.

ERIC A. FENNEL, M.D.

### ANNUAL REPORTS:

HONOLULU COUNTY MEDICAL SOCIETY  
NURSES' ASSOCIATION, TERRITORY OF HAWAII







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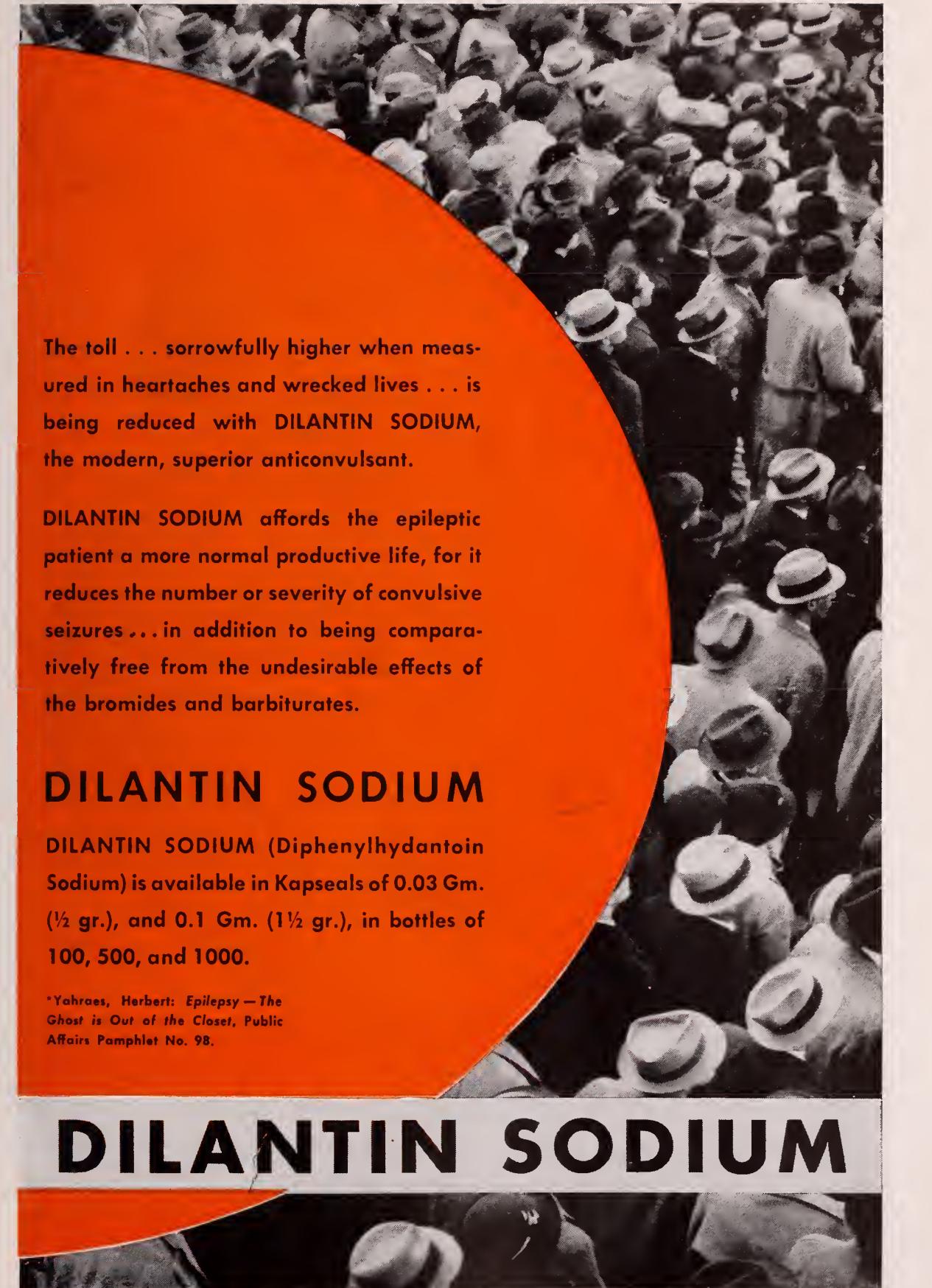
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# The Reticulo-Endothelial System and Resistance to Disease

CHAUNCEY D. LEAKE, Ph.D.

GALVESTON, TEXAS

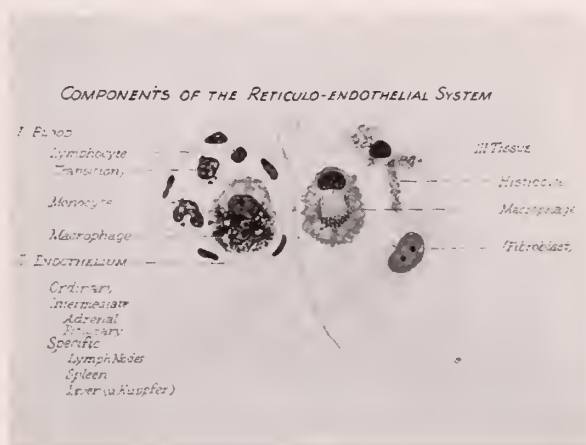
THE problem of disease may be approached in three ways. First, there is the classical and traditional method of waiting until one recognizes a disease, when an attempt is made in accordance with one's understanding of the cause of the disease, to correct it or to "cure" it. A second method of handling disease has resulted from the discovery of specific causative agents in infectious diseases. Thanks to the efforts of W. H. Welch (1850-1934), "preventive medicine" is vigorously developing and is applied successfully to the control of mass epidemics. Preventive medicine has demonstrated its value not only in controlling infectious diseases, but even in preventing many types of metabolic disorders. The third method of approaching the problem of disease is relatively new. It emphasizes the importance of promoting resistance to disease. This approach recognizes the significance of the total organism in relation to disease, and implies the broadest possible correlation of all known factors associated with disease and health.

The mechanism of resistance to disease has not been systematically explored. We possess general information, and we think we can appreciate a "sound constitution" when we see it, but we lack organized knowledge regarding factors of importance in promoting resistance to disease. What little we know about resistance to disease has been developed by two groups of workers; first, those who have studied immunity in infectious processes, and second, those who have studied the constitution and well being of the body as a whole.

While L. Pasteur (1822-95) first emphasized the significance of resistance to disease, it was the German precisionists in bacteriology who developed the modern concept of immunity. R. Koch (1843-1919), P. Ehrlich (1854-1915), E. Fischer (1852-1919), E. Behring (1854-1917), and A. Wassermann (1866-1925) laid the foundations for our modern theories of immunology. These were more systematically developed by the French group with J. J. B. V. Bordet (1870-1942), E. Metchnikoff (1845-1916), E. Roux (1853-1933) and A. Besredka (1870-1940). English and American workers, most of whom were Welch's pupils, further elaborated our ideas on the processes of immunity, and we owe much to A. E. Wright

(1861-1944), G. H. F. Nuttall (1862-1937), S. Flexner (1863-1936), H. T. Ricketts (1871-1910), V. C. Vaughn (1871-1933), T. Smith (1859-1935), H. Zinsser (1878-1941), H. Noguchi (1876-1928) and K. Landsteiner (1868-1945). Current research in the field is reviewed by Sevag (1945).

The importance of constitutional factor in resistance to disease was well recognized anciently, particularly by the Hippocratic writers. Galen in the second century also appreciated the importance of the well being of the body as a whole in resistance to disease. This consideration was not further developed until the time of Sydenham. More recently it has been emphasized by German writers and in this country by Draper and W. F. Petersen.



Now, a new more general approach to the problem of promoting resistance to disease has developed in Russia. This is based on the recognition of the importance of the reticulo-endothelial system in phagocytosis, in anti-body formation, and in endocrine control.

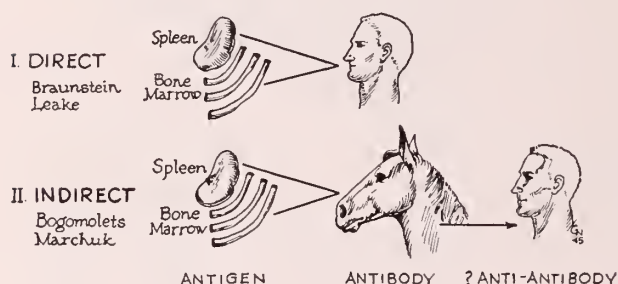
The reticulo-endothelial tissue is scattered throughout the body. In general, all cells showing a special ability to ingest colloidal dyes are considered to belong to this system. Typical components of the system are the phagocytic cells of lymph-nodes and spleen, macrophages, histiocytes, and von Kupffer cells. Such white blood cells as lymphocytes, monocytes, and macrophages also belong to the system. In addition, there is special endothelium in pituitary and adrenal tissue, bone-marrow, and connective tissue.

From the University of Texas Medical Branch, Galveston. Delivered before the Hawaii Territorial Medical Association, May 3, 1946.



A. A. Bogomolets (1941) places special emphasis on the importance of the connective tissue in resistance to disease. In addition to its phagocytic activity, connective tissue functions, according to Bogomolets, in regulating cellular nutrition and metabolism, in regeneration and repair, and in endocrine balance. Bogomolets has stimulated wide research in Russia. A special conference in Kiev in 1940 reviewed various aspects of this research. An abstracted summary appeared in 1943.

#### METHODS OF INFLUENCING THE RES



Bogomolets and his associates have developed a standardized method of influencing the reticulo-endothelial system for therapeutic usefulness. The method involves the preparation of "antireticular-cytotoxic serum" (ACS). The method is an indirect antibody procedure, through the preparation of anti-sera to homologous or heterologous spleen and bone-marrow. Complement fixation titres as high as 1:1600 are obtained in the rabbit for anti-rat serum.

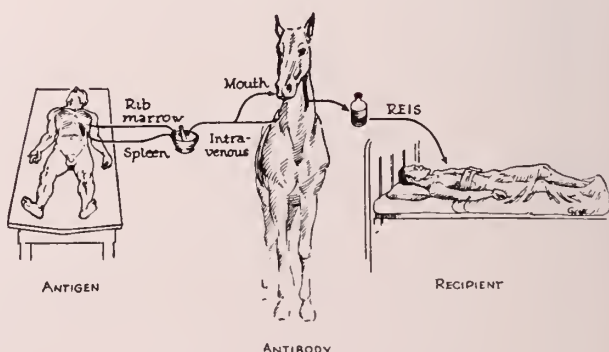
Experimental studies show that this anti-spleen and bone-marrow serum may either inhibit or stimulate the reticulo-endothelial cells, dependent upon dosage. In general, strong doses block the reticulo-endothelial system, while very small doses stimulate it. Bogomolets (1943) emphasizes that "the serum is capable of stimulating the functions of the connective tissue only when used in small doses averaging 0.05 to 0.1 cc." The designation "cytotoxic" is apparently used by the Russians because of the obvious blocking effect of the serum in the sort of doses that ordinarily might be used. We consider that the term "reticulo-endothelial immune serum" (REIS) is more suitable than the term "antireticular-cytotoxic serum" (ACS). REIS describes the preparation in a more general and satisfactory immunological way, without emphasizing its "cytotoxic" properties.

The Russian reports have stimulated much research interest in this country. Unfortunately, over-enthusiastic popular accounts have appeared which are not justified as far as our present knowl-

edge goes. Much fundamental research remains to be done before clinical studies are warranted. On the other hand, some clinicians feel that since there is no significant toxicity involved in the serum preparations, attempts should be made to obtain clinical evidence for or against their possible usefulness. While many such attempts are being made, the effort is not satisfactorily organized on a clinical research basis as yet. Our feeling is that we should first determine whether or not the many Russian claims can be substantiated in the laboratory. We are making a systematic attempt to undertake this task.

Efforts have been made in the past to modify the activity of the reticulo-endothelial system by means of the direct administration of organ preparations, using chiefly spleen and bone-marrow. These may be considered to contain agents for the direct stimulation of the reticulo-endothelial system. In 1923, Leake confirmed Danilewsky, Krumbhaar and Musser, and Downs and Eddy, in finding an initial drop in the red cell count, followed by a rise, in rabbits given fresh spleen extracts parenterally. Bone-marrow injections produce a direct rise. A more prompt and lasting rise in the red cell count results from the administration of combined bone-marrow and spleen extract. Associated with this rise in red cell count there may be an increase in the number of granular leucocytes and platelets. These effects may result from increased activity of blood-forming organs or from release of blood elements from storage organs. Tissue examination after prolonged administration of spleen and bone-marrow extract reveals that there is extension of blood-forming areas.

#### ANTICYTOTOXIC SERUM ACS\* BOGOMOLETS

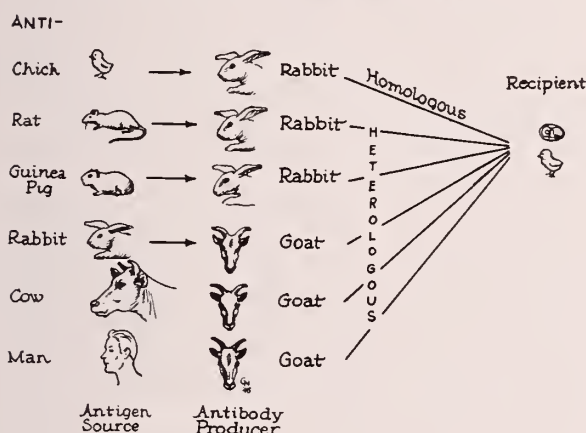


These results were applied clinically to the treatment of anemias secondary to chronic infections. No favorable response was noted in pernicious anemia. Combined desiccated spleen and bone-marrow is effective in anemias secondary to chronic



infections, when administered by mouth. There is not enough iron in the preparations to account for the effect by increasing the iron content of the body. On the other hand, the studies of Cartwright and his associates (1946) suggest that chronic inflammatory processes cause iron fixation in reticulo-endothelial tissues, with resulting anemia. Spleen and bone-marrow administration may block these tissues from binding iron.

#### RETICULO ENDOTHELIAL IMMUNE SERA (REIS)



The administration of sera containing spleen and bone-marrow antibodies, as described by the Russians, is claimed by them to be helpful in the management of Rickettsial diseases, in which the reticulo-endothelial system is known to be involved, and in a variety of other pathological conditions including tuberculosis, malignancy, hypertension, and surgical infection. Further, claims are made that the sera are useful in promoting wound healing and longevity.

Most of these claims may be found in the collected papers presented at a conference on the reticulo-endothelial system held at Kiev under the auspices of the Ukrainian Academy of Science, December 1 to 4, 1940. These reports are summarized in English, French and German, and are remarkably comprehensive and properly conservative.

When Bogomolets' English summary was republished in 1943, we were stimulated to undertake experimental studies to determine whether or not the general principles proposed could be confirmed.

#### EXPERIMENTAL

The inhibitory and stimulating properties of REIS are being explored systematically by *in vitro* and *in vivo* experiments. Much direct evidence for the activity of antisera has been accumulated by direct observations of cell behavior in simple hanging-drop tissue culture preparations. Tissue

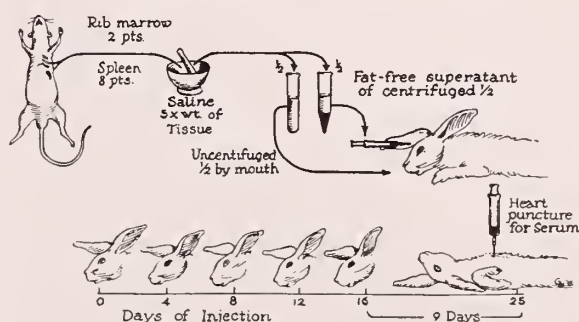
cultures of embryonic and newborn chick spleen, after contact with strong REIS, show clumping and reduction in the migration of cells (Pomerat and Anigstein, 1945a). This also is true for the spleen of newborn guinea pigs (Pomerat and Anigstein, 1944) and of rats (Pomerat, 1945a). The clumping of splenic cells as a result of high concentration of antisera is an excellent end-point for quantitative studies. Giant cell formation is also frequent and is to be described in a cytological study of splenic cultures.

Mesenchyme cells (usually called fibroblasts in the literature of tissue culture) can be prevented from migrating from chick heart fragments by strong REIS (Pomerat and Anigstein, 1945b). This suggests that such methods as those of Medawar (1940) could be employed in the study of cytotoxic sera.

Recent experience has shown that a 1:4 dilution of an anti-rat serum with a complement fixation titer of 1:1600 (as estimated by Doctor Robert Wise) inhibits the migration of malignant elements from fragments of Walker rat sarcoma #319. Cells on the periphery of such explants were found to be rounded and markedly pyknotic. Splenic cultures in the same series of experiments were inhibited by as low a titer as 1:256.

In the studies reported, sera prepared against a different species of animal (heterologous) were regularly tested. Results indicated that anti-spleen and bone-marrow preparations in strong concentration are species specific. Experience in the tissue culture laboratory indicates that there is overlapping organ specificity in a given species; that is, cultures of spleen are markedly sensitive, but heart mesenchyme, especially from 6-day chicks, and even neoplastic tissue apparently are injured by homologous anti-spleen and bone-marrow sera.

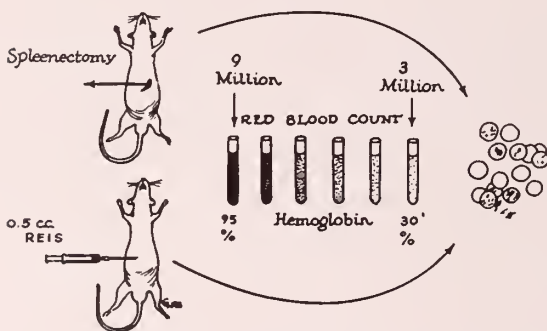
#### PREPARATION OF ANTI-RAT SERUM



The interplay between malignant tissue and splenic cells, which long has proved interesting to students of oncology, may find new interpretation on the basis of a mechanism involving REIS. Murphy (1914), Stevenson (1917), Danchakoff

(1921) and Hungate and Snider (1945) have given unquestionable proof that the addition of spleen to eggs causes inhibition of tumor cells introduced as grafts. It seems that these investigators gave insufficient consideration to the possibility that adult splenic cells may act as antigen to the tissues of the developing chick. Burke, Sullivan, Peterson and Weed (1944) established ontogenetic changes in the antigenic properties of chick organs. Tissue culture experiments (Pomerat, 1945b) demonstrate that conjoint cultures of rat spleen and Walker rat sarcoma #319 show growth not noticeably different from that obtained when these tissues are cultivated separately. The addition of anti-rat REIS to conjoint cultures, however, produced marked inhibition of sarcoma cells at concentrations which did not affect tumors cultivated without spleen fragments. It is believed, therefore, that the inhibitory action of splenic cells on tumor tissue in egg culture may be the result of parallel development of a REIS factor.

#### EXPERIMENTAL BARTONELLOSIS WITH STRONG REIS



The use of "blockading" doses of sera by Soviet workers suggested a series of *in vivo* experiments on strains of rats proved to be carriers of bartonella infections. It was found that even a single intraperitoneal injection of 1 cc. of anti-rat serum might completely imitate the effect of splenectomy in provoking marked anemia and the appearance of intra-erythrocytic organisms (Anigstein and Pomerat, 1945a). Control injections in non-carriers (Wistar strain) did not produce such effects but simulated responses occasioned by splenectomy in such strains. Finally, the use of anti-chick and guinea pig sera was not found to provoke either anemia or bartonellosis in carriers (Anigstein and Pomerat, 1945b). These experiments help in establishing the reality of the inhibitory action of strong antisera *in vitro* and extend the observation that such activity is species specific.

Direct demonstrations of cellular stimulation by weak dosages of antisera have proved tedious and

difficult. Provisional experiments in which various concentrations are tested are encouraging, but large numbers of such cultures are necessary to establish the validity of the growth curves. A 1:400 dilution of an anti-chick serum with a complement fixation titer of 1:1200 appeared to produce outgrowth exceeding that of control cultures. Moreover, heart cultures in Carrel flasks appeared more stimulated by strong concentrations of embryonic extract if they had had previous treatment with anti-rat serum (Pomerat, 1945b).

Preliminary studies by Drs. Paul Ewing and George Emerson on the use of antisera in the treatment of trypanosomiasis in rats give results which are not therapeutically promising. Blocking doses of REIS favor trypanosome infection in the same way as splenectomy.

According to Bogomolets, injection of minute doses of spleen and bone-marrow antisera produces a relative lymphocytosis. This disappears after three to four hours and is replaced by a monocytosis. Blood studies by Drs. T. B. Thomas, G. Emerson, and P. Ewing on the effect of homologous REIS at high dosage in the rat are in progress.

The effect of both spleen and bone-marrow antigen and of REIS injection on the spleen, bone-marrow, liver, thymus and lymph nodes of suitable animals is being systematically studied by Dr. T. B. Thomas. Preliminary observations indicate a considerable shift in cellular patterns, particularly in the spleen, following the administration of either antigen or antiserum.

#### AVERAGE % DIFFERENCE IN AREA OF 33 CHICK HEARTS

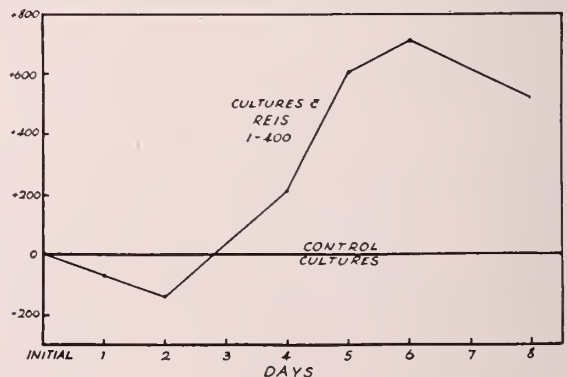


FIG 7. Showing stimulating effect of dilute REIS on embryonic chick heart in tissue culture.

The successful demonstration of the inhibitory properties of strong concentrations of REIS has initiated a search for the active principle involved. Fractionation procedures have been devised so as to produce albumin and globulin preparations not-

ably free of ammonium sulfate. The minimum dosage of such fractions which will produce marked clumping of splenic cells and the complete inhibition of outgrowth from heart fragments has been used as a method of isolating and assaying the inhibitory factor. The globulin fraction of homologous REIS has been found to be the effective agent of inhibition. Albumin fractions from the same sera do not damage cells *in vitro* (Frieden, Pomerat and Anigstein, 1945).

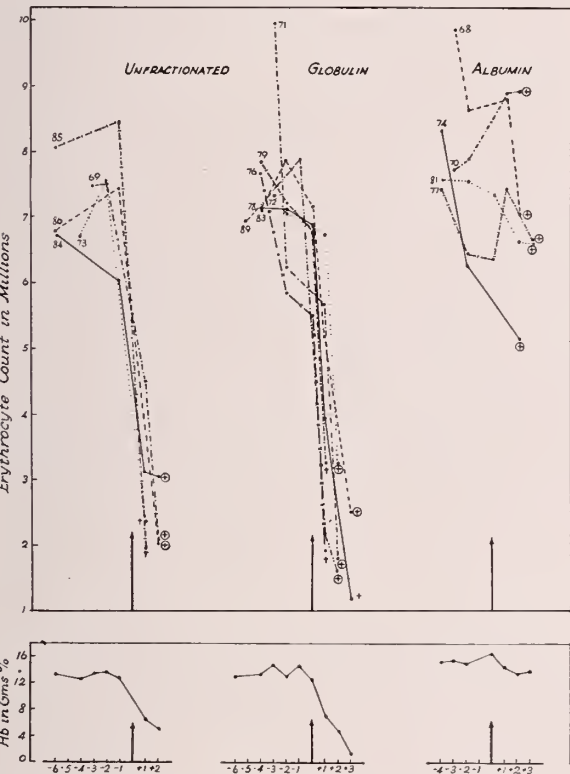


FIG. 8. Showing effects of fractions of REIS on erythrocytes and hemoglobin in small animals.

In tissue cultures of the buffy layer of blood, only monocytes persist beyond about forty-eight hours of incubation. Both lymphocytes and monocytes show ameboid activity and transform into macrophages and, ultimately, under special conditions, into fibroblasts capable of organizing intercellular collagenous and reticular fibers (Bloom, 1937). This technique is being utilized to test the influence of unfractionated, as well as globulin and albumin fractions of, anti-human REIS on the potencies of human leucocytes. The inhibitory action of globulin fractions has been demonstrated by the limitation of migration and transformation of non-granular elements in cultures of the buffy layer of blood. This effect was found for homologous but not for heterologous antisera.

The tissue reaction to REIS has been proposed by Thomas and his associates as a bio-assay method. Using mice it was found that in contrast to an irregular blood response to high doses of REIS there is a sharp regular loss of small lymphocytes in the spleen from the periphery of the Malpighian corpuscles. At much lower dosages there is abundant evidence of phagocytosis and lymphorrhesis.

Emerson and his associates (1946) find that high doses of REIS produce a severe macrocytic anemia with showers of reticulocytes. This effect is noted particularly in splenectomized mice. They point out that there is a danger of a severe hemolytic anemia in the possible therapeutic use of blocking doses of REIS. Hemolysins do not seem to be involved in this effect.

It is difficult to appraise the significance of these experimental results. Direct experimental studies by Nickerson and his associates (1946) on the effect of antireticular-cytotoxic serum (ACS) on the healing of experimental wounds in rats, showed no stimulating effect on the healing process at the dose used. Apparently, dosage is extremely important. O. A. Bogomolets (1944), in describing the stimulating effect of ACS on healing of bone fractures, says, "We suggest 0.07 cm<sup>3</sup> of undiluted serum, with a titer of 100-120, as an average therapeutic dose of the antireticular-cytotoxic serum. The dose is usually injected under the skin three times with intervals of 2-3 days in between."

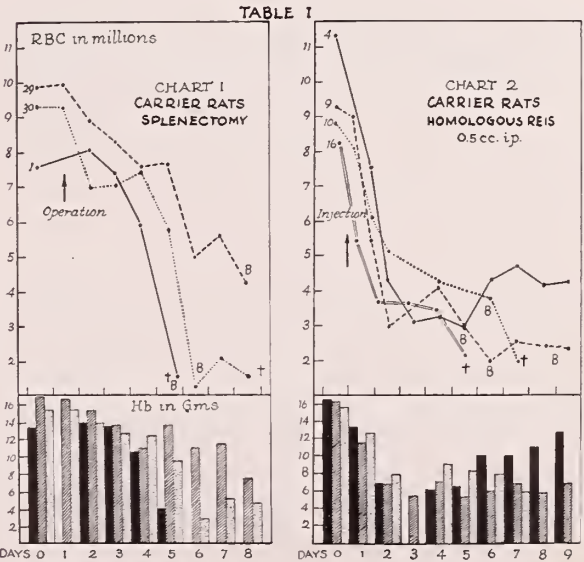


FIG. 9. Showing similarity in blood response to splenectomy and blocking doses of REIS.



## SUMMARY

It appears that much experimental and careful clinical study is necessary to appraise the possible value of reticulo-endothelial immune sera in clinical conditions. The evidence so far accumulated by careful experimentation in this country confirms the essential claims of the Russian investigators that low doses of REIS tend to stimulate the reticulo-endothelial system, while large doses block it. Much more evidence must be gathered before there is justification for clinical use of REIS. Careful experimental studies are indicated in order to give the necessary background for appropriate clinical study and trial. Clinical studies with REIS should proceed under the most carefully controlled conditions. The evidence, however, appears to be sufficient to justify the hope that an important method of promoting resistance to disease has been found. While stimulation of the reticulo-endothelial system may promote helpful effects in resisting disease, it can hardly become more than an adjunct to a healthy regimen of life, including a balanced dietary, exercise, rest, and necessary attention to the well established procedures of preventive medicine now in use. It can hardly be expected to compensate much for hereditary defects, nor can the promotion of resistance to disease be considered a substitute for effective public health procedures. An important development from the study of the promotion of resistance to disease may be the focusing of more attention upon the individual as a whole.

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# Observations on a Budding Fungus-like Form of *E. Coli* in the Urine of a Patient Receiving Penicillin

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HONOLULU

**D**URING the routine examination of a urine specimen from a patient receiving penicillin, peculiar, large, elongated, gram-negative organisms were observed in the urinary sediment on four separate occasions. Although they varied somewhat in appearance, the predominant form was an elongated structure 10 to 15 microns in length with a large oval or globular central swelling (Fig. 1). They resembled budding fungi in some respects and were so regarded by a pathologist and a hematologist<sup>1</sup> who examined gram stained smears of the urine sediment.

These organisms were actively motile, and attempts to culture them on Sabouraud's agar gave negative results. On ordinary media, however, such as brain heart infusion agar and eosin methylene blue agar, a pure culture of *E. coli* was obtained in every instance. These observations led us to believe that these peculiar organisms were involution forms of *E. coli*, perhaps resulting from the penicillin therapy.

The patient was a 37 year old Caucasian female with a staghorn calculus in the left renal pelvis. She received 20,000 units of penicillin three times a day from Dec. 19, 1945, to Jan. 25, 1946. The urinalyses done on this patient are summarized in Table 1.

TABLE 1.—*Summary of Consecutive Urinalyses*

DATE	REACTION OF URINE	MICROSCOPIC
12-31-45	Acid	Large zygospore-like forms; actively motile.
1-5-46	Acid	Large zygospore-like forms; motile; cultures: <i>E. coli</i> .
1-12-46	Acid	Netted mycelium-like forms; non-motile.
1-14-46	Acid	Bacilli only.
1-18-46	Acid	Large zygospore-like forms; actively motile.
1-21-46	Acid	Bacilli only.
1-22-46	Acid	Bacilli only.
1-24-46	Acid	Negative.

A short time later the report of Altire-Werber *et al.*<sup>2</sup> appeared describing exactly similar rounded bodies in the urine of penicillin-treated patients. These workers found that cultures failed to yield fungi of any sort, but upon ordinary media *E. coli* invariably grew out. They proved that the peculiar organisms observed in the urine sediments were

morphologic variants of *E. coli* by inoculating broth cultures containing penicillin varying in concentration from 5 to 600 Oxford units per cc. with a pure strain of this bacterium. At a concentration of 75 units per cc. the organisms resembled diphtheroids; at 100 units per cc. the organisms took the form of long unsegmented filaments; and at a concentration of 150 units per cc., rounded bodies not unlike those observed in the urinary sediments were obtained. All forms reverted to type when subcultured on media containing no penicillin. Growth was completely inhibited in media containing 300 units of penicillin per cc.

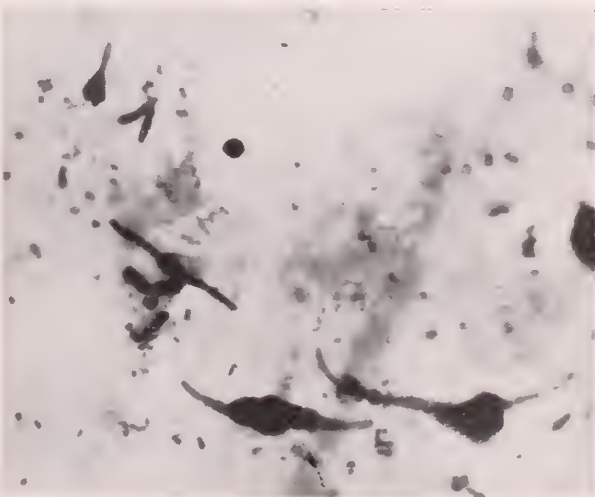


FIG. 1. Elongated bodies with central round or oval swelling found in the urine. Methylene blue. X1,800.

In an effort to duplicate these results, the following experiments were carried out. A series of broth tubes containing penicillin varying in concentration from 5 to 600 units per cc. was inoculated with 0.1 cc. of a 1:100 dilution of a 6 hour pure culture of *E. coli*. Control tubes containing no penicillin were inoculated at the same time. No growth was obtained in any of the penicillin-treated tubes even after ten days of incubation, while heavy growth occurred in all of the control tubes after twenty-four hours. The same experiment was then repeated except that the tubes were incubated for six hours before adding the penicil-

Received for publication, February, 1946.

From the St. Francis Hospital Laboratory.

<sup>1</sup> Tilden, I. L., and Hamre, E.: Personal communications.

<sup>2</sup> Altire-Werber, E., Lipschitz, R., Kashdan, F., and Rosenblatt, P.: The Effect of Incompletely Inhibitory Concentrations of Penicillin on *Escherichia Coli*, *J. Bact.* 50:291 (Sept.) 1945.

lin. After twelve hours of incubation the penicillin-treated tubes showed a 75 per cent reduction of growth as compared with the control tubes but no abnormal forms were observed. After five days there was no evident growth except in the tube containing 5 units of penicillin per cc. Bacterioscopic examination of this culture showed some very long nonmotile forms but there were no bulbous structures resembling those in the urine sediment.

#### COMMENT

Despite our failure to reproduce these bizarre organisms in vitro, there can be little doubt that they represent morphologic variants of *E. coli* appearing as the result of penicillin therapy. It may be that the particular strain of *E. coli* used in our experiments was unusually susceptible to the bacteriostatic action of penicillin. All of the variant forms observed by Altire-Werber *et al.* were nonmotile; in our case they were actively motile on most occasions. The urine was always acid in reaction, which is in accord with the experience of the above mentioned workers.

#### CONCLUSIONS

Peculiar, large, actively motile, gram-negative, elongated organisms with a central globular or oval swelling were observed in the urine of a patient receiving penicillin. It is probable that these forms are morphologic variants of *E. coli* since this organism always grows out when the urine sediment is cultured upon ordinary media. These variant forms are found only in acid urines and apparently may be either motile or nonmotile.

#### ADDENDUM

Since this report went to press, a second urine was encountered which contained organisms similar to those described above. The urine was acid in reaction and came from a patient receiving penicillin. In this case the organisms were nonmotile and cultures yielded *A. aerogenes* instead of *E. coli*.

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# Penicillin: Its Effect on Bacterial Morphology

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HONOLULU

WHEN Pasteur was fussing with his sick wines and bouillon, yeast was yeast and west stayed west.

When Koch worked with the anthrax bacillus, he had three morphologic forms to deal with: (1) the rectangular form of the vegetative stage, (2) the bulging form of the bacillus, pregnant with a spore and (3) the dormant, rounded spore itself.

When he went into his first wife's kitchen, borrowed some gelatin and plated out the cholera vibrio, he had something more complicated on his hands. The fresh cultures showed the typical comma form of the cholera vibrio, but when living and housing conditions became disadvantageous, these bugs assumed a great variety of shapes, called involution forms, which probably represented the dead or dying bacilli.

The colon bacillus or the *B. aerogenes* usually has little tendency to change its shape. But—

D.Y., an apprentice of the recently inaugurated course in medical technology at the University of Hawaii, doing a microscopic examination on a routine urine (knowing nothing about the case) found some very peculiar, non-motile bodies, that were not pictured in any of the standard text books. She did not throw the specimen down the sink; she asked a senior technologist for help.

He remembered an article in a recent issue of the *Journal of Bacteriology*<sup>1</sup> and put all the laboratory on the right track. The bodies looked like fertile pollen granules that were beginning to send out pseudopods. They also looked like some strange sporulating form of fungus or like something Walt Disney might have created during an attack of insomnia. The shapes were bizarre in the extreme and are pictured, as stained smears, herewith. This urine sediment was stained by the usual methods, including Gram's stain, and was planted to (1) glucose broth, (2) Teague's medium (now known as eosin-methylene blue agar: such is fame) and (3) purple lactose agar, which is less inhibitive than Teague's. We did not use mycologic media, since we had read the article in the *Journal of Bacteriology*.

The patient, leprous, with an intercurrent urinary complication, had been receiving 20,000 units of penicillin, by hypo, every three hours for a number of days.

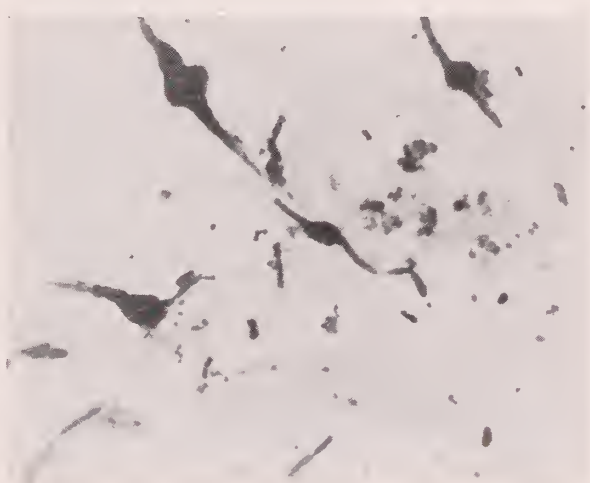


FIG. 1. Urine sediment, stained by methylene blue. Note comparative size of usual bacteria—bacilli and cocci—and the relatively huge size of the variants. X1,800.

The (1) glucose broth yielded a culture of gram negative, fat plump bacilli and a few gram positive cocci. The bizarre forms were not to be found. The (2) Teague medium and the (3) purple lactose agar yielded identical results. The isolated colonies were large, sloppy, smooth, mucilaginous; they were acid-producers and on Teague's plates gave, sometimes but not always, a central black but not iridescent point. Presumptive diagnosis was "almost pure culture of *B. aerogenes*." This bacillus grew well in subculture on Simmond's citrate medium.

From a single, juicy, lactose agar colony a saline suspension was made as an inoculation source.

A series of 10 cc. each, glucose broth tubes, with fermentation tubes included, were set up, with penicillin added so that they had the following concentrations of that product: 0, 5, 10, 15, 20, 30, 75, 100, 150, and 200 units per cc. Each was inoculated with a capillary drop of the saline suspension of an isolated colony of typical *B. aerogenes*, first generation on artificial medium.

Eighteen hours later all tubes showed growth, measured by turbidity and gas formation; the 200,

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<sup>1</sup> Altur-Werber, E., Lipschitz, R., Kashdan, F., and Rosenblatt, P.: The Effect of Incompletely Inhibitory Concentrations of Penicillin on *Escherichia Coli*, Jr. *Bact.*, 50:291 (Sept.) 1945.

150 and 100 unit tubes, only within the small tubes where the penicillin had not penetrated by convection currents; in the others, homogeneously.

I spare you the details of all the examinations. Five concentrations of penicillin yielded widely varying pictures.



FIG. 2. Cultures of the urine yielded an almost pure culture of *B. aerogenes*. Planted to broth, with a penicillin concentration of 20 units per cc., the result was a bacillus with marked polar staining resembling a diphtheroid bacillus or a plague bacillus; the picture fails to show with clarity that polar staining so prominent in the direct examination.

(1) No penicillin. Gram negative, very fat, plump bacilli, typical of *B. aerogenes* with no polar staining.

(2) The 20 penicillin unit tube showed practically all bacilli with polar staining resembling diphtheroid bacilli.

(3) The 35 unit tube showed many of the diphtheroid types, but in addition a fair number of the swollen, bizarre types found in the direct examination of the urine sediment.

(4) The 75 unit tube showed only a few of the diphtheroid type, very many of the bizarre types and a few long, filamentous forms of "strepto-bacilli," with little or no segmentation but with very granular staining. These blobby, bizarre types, pictured herewith, were consistently gram negative in their filamentous ends or tails, but the swollen, central blob had a tendency to retain, evenly or unevenly, the gentian violet, thus making a very colorful picture.

(5) The 100 unit tube showed only sparse growth and this consisted chiefly of the long, granular, filamentous forms.

When all these morphologic variants were planted to glucose broth and other media without penicillin, they gave typical growth, colony forma-

tion and microscopic appearance of *B. aerogenes*, with the exception that, in the first generation, there were a fair number of the polar staining type. The reversion to type was almost perfect.

The original urine sediment, which showed very many of the blobby, bizarre forms when fresh, was kept in the refrigerator for forty-eight hours and re-examined; it was then difficult to find any of these unusual forms.

Teague plates, containing penicillin concentrations per cc. of 37 and 75, were stroked; these yielded only the plump bacillary form, but with the polar staining very, very marked.

Teague plates had deposited upon the surface a large loopful of penicillin (1 cc. = 1,000 units) and the inoculating needle was dragged through and beyond this drop. This method yielded only typical *B. aerogenes* with some bi-polar stained forms.

Altire-Werber *et al.*<sup>1</sup> say: "Gardner (1940) observed microscopic changes in rod shaped organisms that showed inhibition of growth at incompletely inhibitory concentrations and appeared to be mainly due to failure of fission. He observed that the majority of cells took the form of unsegmented filaments. He believed this was due to the fact that growth proceeded but that division and separation did not follow in due course."

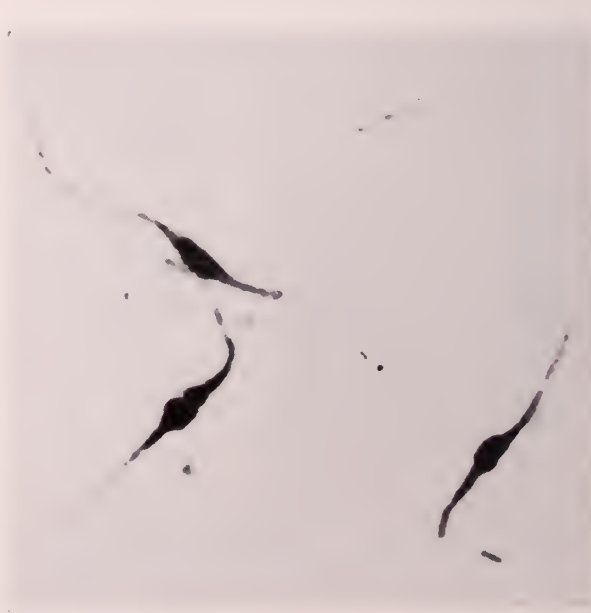


FIG. 3. Cultures of *B. aerogenes*, planted to glucose broth with a penicillin concentration of 75 units per cc., gave, after 18 hours' incubation, a very large number of the pictured forms, almost identical with those observed in the original urine sediment. Internal structural details seemed to stain more differentially in the cultured forms than in the ones recovered from urine direct.

Not only does this seem an adequate explanation of how penicillin really works, *in vivo*, but it seems an apt explanation of the forms we observed: it is easy to visualize a bacillus growing and growing, unable to shake off its mate, unable to divide, and so simply becoming longer and longer and, at times, from over-nutrition, becoming very obese in the middle.

It will be very interesting to see what other morphologic variants can be produced from other bacteria, not so closely related as are *E. coli* and *B. aerogenes*. This should interest the pure bacteriologist immensely but may have little practical value to the technician in the clinical laboratory.

It is sufficient for that technologist to know that such forms may and do appear in the urine of patients treated with penicillin and that they are not yet pictured in standard text books nor in books on mycology, which the uninitiated would think of first.

#### CONCLUSION

Extreme morphologic variants of *B. aerogenes* may be produced by sub-lethal, partly inhibitory concentrations of penicillin; the reaction is reversible.

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# Acute Pericarditis Simulating Coronary Thrombosis

DIFFERENTIAL CONSIDERATIONS

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AIEA HEIGHTS, OAHU

**A**CUTE, subacute, or chronic inflammation of the epicardial surface of the heart, with or without pericardial effusion, may be encountered as an apparent clinical entity of varied etiology, or as an obviously complicating condition which may be secondary to a number of different disease processes. Among these latter may be mentioned rheumatic fever, tuberculosis, myocardial infarction, uremia, pneumococcal pneumonia, primary atypical pneumonia, septicemias of various types, cardiac or chest trauma, and primary or metastatic malignancy.<sup>1</sup> Indeed, from evidence obtained on postmortem examinations, pathologists have repeatedly emphasized that such an inflammatory process during life must be fairly frequent in its occurrence; and this is in keeping with the observation that the diagnosis of pericarditis, and especially of acute fibrinous pericarditis, is more often missed than made.

In these times, therefore, when the diagnosis of "coronary thrombosis" has become so frequent and so popular, serious attention must be given the differential diagnosis between acute myocardial infarction and acute pericarditis, since in certain types and stages of these two processes the clinical and electrocardiographic findings may be misleadingly similar, whereas the therapeutic and especially the prognostic considerations may be, on the contrary, quite different.

I have been prompted to discuss this subject because during the past five months, on this island, I personally have encountered a total of six cases, in young and middle-aged individuals, in which after fairly full and protracted study the clinical diagnosis of acute myocardial infarction—with all its serious prognostic and restrictive implications—had been made and accepted, or was being seriously entertained; whereas a review of the patients' records, of the electrocardiographic evidence, the later clinical findings, and the total course of the disease, indicated quite clearly that the correct diagnosis in each case should have been acute fibrinous pericarditis. This type of error is not new. Noth and Barnes,<sup>1</sup> Bellet and

McMillan,<sup>2</sup> Wolff,<sup>3</sup> and others as well, during recent years have pointed out the pitfalls in the differential diagnosis of these two conditions, and have emphasized the clinical and electrocardiographic criteria by means of which the diagnosis of pericarditis may be suspected and established. Nevertheless, my recent experience indicates that their observations need to be more fully stressed and more widely repeated.

## AN ILLUSTRATIVE CASE

Fortunately for the patients perhaps, but unfortunately for my purposes, the several individuals with acute pericarditis to whom I had reference have now been evacuated to the States, and their chest x-rays and important parts of their clinical records have been shipped with them. I cannot therefore demonstrate their objective findings. However, for purposes of illustration, let me describe the case of a 35-year-old pharmacist's mate third class who was admitted to our hospital on September 2, 1945, and evacuated in excellent clinical condition about one month ago. In February, 1945, in California, and again in June, 1945, while aboard ship enroute to the Philippines, this patient had had precordial and left chest pain of moderate severity, aggravated by respiration, lasting for two to three days, which was diagnosed as acute fibrinous pleurisy. No chest x-rays were then taken. On July 5, on Samar, the patient again had a sudden onset of anterior chest pain which was sharp in character and on this occasion accompanied by malaise and weakness. By July 9 he had become febrile, as well as short of breath, and since the chest pain had become constant, severe, and now radiated to both shoulders and down both arms to the elbows, he was hospitalized for observation and treatment. A pericardial friction rub was heard at that time and it was noted that the pain was worse when the patient was lying down or with changes in body position. Thereafter for ten days the patient was seriously ill, with a fever to 103° F., with rales in his chest, cyanosis, evidences of mild shock, and

<sup>1</sup> Noth, P. H., and Barnes, A. R.: Electrocardiographic Changes Associated with Pericarditis, *Arch. Int. Med.* 65:291 (Feb.) 1940.

Presented at the December 7, 1945 meeting of the Honolulu County Medical Society.

<sup>2</sup> Bellet, S., and McMillan, T. M.: Electrocardiographic Patterns in Acute Pericarditis: Evolution, Causes and Diagnostic Significance of Patterns in Limb and Chest Leads: Study of Fifty-seven Cases, *Arch. Int. Med.* 61:381 (March) 1938.

<sup>3</sup> Wolff, L.: Acute Pericarditis Simulating Myocardial Infarction, *New England J. Med.* 230:422 (April 6) 1944. Acute Pericarditis with Special Reference to Changes in Heart Size, *New England J. Med.* 229:423 (Sept. 9) 1943.

cardiac enlargement, so that oxygen therapy was given. Chest x-rays revealed findings interpreted as cardiac enlargement, pulmonary congestion, and evidence of fluid in the left costophrenic angle. Electrocardiograms showed at first elevation of the RS-T segments in Leads 1 and 2 without definite QRS changes; later, T wave inversion in Leads 2 and 3 was observed, and on these latter findings a diagnosis of acute posterior myocardial infarction was made. The patient improved after July 20, only to have on July 27 a recurrence of the severe substernal and precordial pain, which radiated to the neck and shoulders, again with fever, cyanosis and shortness of breath, requiring oxygen for therapy. After about one week a slow gradual improvement again ensued, but about August 20 a third return of similar but milder symptoms occurred. It was considered that the patient had had three bouts of coronary thrombosis during a six weeks' interval, and he was evacuated by air to the Aiea Heights Naval Hospital for further treatment.

During his stay in our hospital from September 2 to November 3, this patient showed at first occasional mild and indefinite anterior chest pain, a rare slight fever, an increase in his sedimentation rate, and on electrocardiographic study T wave inversions without QRS changes were noted in Leads 2 and 3 for the first two weeks. Comparison of chest x-rays taken here with those previously made revealed that the cardiac silhouette had returned to a normal size and contour, but the lung fields showed scattered areas of pulmonary infiltration or fibrosis that did not appear to be tuberculous in character. Sputum tests were repeatedly negative for acid-fast bacilli. All evidence of illness gradually cleared within about three weeks after his arrival here, except that the pulmonary findings as shown by chest x-ray persisted. The patient was rendered ambulatory and active without any symptoms and the electrocardiograms were then noted to be entirely normal, including those taken following a two-step exercise test. Moreover, encouraged by our insistence that he did not have serious heart disease and had not had three bouts, or even one, of "coronary thrombosis," that careful review of the entire course of his illness indicated the correct diagnosis to be acute fibrinous pericarditis, the patient gradually recovered from a severe anxiety reaction regarding his future life which had precipitated a virtual invalidism.

#### DIFFERENTIAL DIAGNOSIS

From this story it is evident that the clinical picture of acute pericarditis may indeed have a

close resemblance to that of acute myocardial infarction, and that the differential diagnosis between the two conditions may be difficult. In both there may be severe precordial and substernal pain with radiation into the shoulders and arms, as well as dyspnea, fever, leukocytosis, elevated sedimentation rate, pericardial friction rub, cardiac enlargement, arrhythmias, evidences of shock with drop in blood pressure, and electrocardiographic abnormalities of a superficially similar appearance. On the other hand, careful attention to details of the differences in the two clinical pictures will usually permit a proper differentiation of acute pericarditis from acute myocardial infarction.

The *pain* of acute pericarditis is often aggravated by respiration, by changes in body position and by cough in a much more clear-cut manner than the waxing and waning pain of myocardial infarction. The *shortness of breath* in pericarditis has a more direct relation to the painful shallow respirations. *Pericardial friction rubs* may be heard in either condition, or be absent in either, but in acute pericarditis the friction rub is often present at the onset, and is likely (if present) to persist for a longer time. *Evidence of pulmonary and especially of pleural involvement* by physical examination and by chest x-ray is more frequent in acute pericarditis. *Cardiac enlargement* may occur in either, but rapid and striking changes in the size of the cardiac area or heart shadow are more consistent with pericarditis. The *fever* in pericarditis is usually higher, and more persistent and recurrent; the *leukocytosis* higher and more persistent; the *heart rate* usually slower; the *age* incidence lower; and evidence of antecedent or concurrent *infection*, especially of the respiratory tract, is more frequent. The differences in the *electrocardiograms* are important. Typically in the early phase of acute fibrinous pericarditis electrocardiograms will show striking elevations of the RS-T segments in Leads 1, 2 and 3, without Q wave changes. In acute myocardial infarction Q wave changes are to be expected and the deviations of the RS-T segments as seen in the early phases are reciprocal in Leads 1 and 3. Multiple precordial leads have value in differentiation of acute anterior myocardial infarction because the RS-T and T wave changes in acute pericarditis will not be accompanied by the typical Q wave changes of the former condition. Later in the course of acute pericarditis inversion of T waves in Leads 1, 2 and 3, or in Leads 1 and 2, or 2 and 3, may be noted. In this state the electrocardiographic differentiation is less clear-cut, but the inverted T waves in acute pericarditis are usually less deeply inverted and less strikingly of the

coved-plane contour than is noted in acute myocardial infarction. Moreover, in acute pericarditis the electrocardiographic abnormalities are more transient, tending to disappear within days or weeks rather than tending to persist for months or indefinitely as in acute myocardial infarction.

It is true, of course, that acute myocardial infarction may occasionally occur in younger individuals, just as acute pericarditis may occur in older persons. Moreover, an acute pericardial reaction may appear in the wake of an acute myocardial infarction, and this must be borne in mind in diagnosis. Nevertheless, with a high index of suspicion regarding the possibility of acute fibrinous pericarditis' closely simulating acute myocardial infarction, errors in differential diagnosis of these two conditions can usually be avoided by careful attention to the details of the clinical picture.

#### CONCLUSIONS

In conclusion, therefore, I want to emphasize two important considerations. The first is: since acute pericarditis is very often a condition from which the patient recovers completely without any sequelae, grave harm is done the future life of the pericarditic patient if the erroneous diagnosis of acute myocardial infarction is made in these circumstances.

The second point I wish to stress is: only a keen awareness of the possibility of acute pericarditis and a knowledge of its differential characteristics can prevent the erroneous diagnosis of acute myocardial infarction being made in certain of these cases.

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# VALUE IN MEDICAL RECORDS

RAE HENRIETTA, R.R.L.\*

HONOLULU

THE value of medical records has been discussed frequently from the standpoint of the patient, the physician and the hospital. The value of these records depends upon their quality and frequency of use.

Originally the American College of Surgeons and American Medical Association made hospitals record-conscious by demanding, among their minimum standards for accreditation, that an accurate and complete record be written for all patients and filed in an accessible manner in the hospital. The hospital in turn has had to make the physician record-conscious—and there has been the rub. However, with internes for histories, and Record Librarians and surgical stenographers to make the process as painless as possible, we are getting more complete and hence more valuable records.

After the means for obtaining good records have been set up and are functioning, continued interest in them should be stimulated by use. Lack of interest in medical records on the part of the medical staff can be traced to insufficient use. All too frequently, medical records are filed away and forgotten after they have served in the immediate care of the patient and have been completed in a manner to quiet the constant yammering of the Record Librarian. Unless the records are used a vicious circle is established. Disuse causes lack of interest, lack of interest leads to poorer records, and poorer records lead to complete disuse. The hospital that does not use its records is rather like a manufacturer who throws away an important by-product. Our objective, then, should be to make medical records more valuable in quality and then to see them more fully used.

The value to the patient is rather a static one. So long as a complete record is kept and is available when the patient's need arises, there is not a great deal we can do to increase the value of the record to the patient.

To the physician the immediate need of the record is in the care of his patient, either collecting new information, or, if the patient has had previous admissions to the hospital, providing the record of the patient's condition and treatment on these previous admissions as well as the record

of results obtained. The long range value is continued informal education of the physician in individual or group studies at Staff conferences. This use of the record is usually at a minimum and should be greatly encouraged. When we have statistics covering a period of several years, we are able to give the physician sufficient material to make his study worthwhile in revealing individual and group results. Here we can encourage use of records: for example, when it has been decided to discuss a certain case at a Staff conference, the Record Librarian can check her disease or operation index and suggest to the physician that there are a certain number of cases of the same type available for study. This will increase the value and interest of his discussion and indirectly increase an interest in records.

To the hospital the medical record is the basis of medical accounting, and from the medico-legal angle it has a cold hard cash value. Amazing sums have been paid by hospitals or their malpractice insurance agents when an accurate and complete record would have shown that there was no instance of negligence. Here in Hawaii we have fortunately had very few such cases; however, some Mainland hospitals have been sued for everything from cutting a patient's hair to an anesthetic death. Here the value of the record hangs by a slender thread. In the case of an anesthetic death, the case might be minutely worked up with complete history, consultations, findings and conclusions that surgery was necessary, but should it not be found in writing that the heart and lungs were in satisfactory condition for anesthesia, or should there be no order for a medication which was given, the record has lost its value in protecting the hospital and the physician. It is well to keep this possibility in mind, remote as it may seem.

Primarily it is the hospital's aim to render service to the patient and offer all aids and conveniences to the physician in his endeavor to attain this end. As hospitals and medical teaching have advanced, the hospital has assumed the moral responsibility of seeing not only that the patient was treated and discharged, but whether he was given good treatment and improved, and if not, guiding investigation so the causes will be determined. Medical records are the source of all med-

\* Medical Records Librarian, St. Francis Hospital.

Presented at the Annual Meeting of the Hospital Association of Hawaii, December 7, 1945.

ical accounting and from this the analysis of quantity and quality of the work done in the hospital may be determined. Here we need the help of a functioning Medical Records Committee to determine that there is sufficient data written in sequence of events to justify the diagnosis and warrant the treatment and end results.

We have far more potential value in our records than is ever tapped. I think we have all seen a great stride in the character of medical records here in the last few years and so our next step should be to increase their use individually and for group studies, which in turn will increase their quality and value.

# APPENDICITIS DURING LABOR

REPORT OF CASE

WILLIAM B. PATTERSON, M.D.

PUUNENE, MAUI

THE incidence of appendicitis during pregnancy is probably the same as at any other time. However, the danger that accompanies appendicitis is greater during pregnancy, and increases as the pregnancy nears term. The reason for this is that the localization of the inflammatory process is interfered with and the probability of general peritonitis is increased. If appendicitis occurs during labor or at the time labor is expected, the signs and symptoms that it produces are very apt to be ascribed to labor by both the patient and the physician. If labor proceeds to delivery and the symptoms persist in the early puerperium, they still may be accredited to parturition until definite signs of general peritonitis have developed. If general peritonitis due to a ruptured appendix occurs in the early puerperium, the chances of recovery are not good.

Scott<sup>1</sup> reported two cases of appendicitis during labor and the early puerperium. One case was successfully operated on a few hours after delivery. The other case was unrecognized until three days after delivery, and by the time of operation the appendix had ruptured and general peritonitis had developed. The patient died.

An acutely inflamed appendix irritates the peritoneum and thereby produces most of the signs and symptoms of appendicitis. If pregnancy at or near term is complicated by acute appendicitis, the uterus, which fills the abdominal cavity, will likewise become irritated. This irritation may initiate uterine contractions which, if allowed to continue, may develop into normal labor. Unless this sequence of events is kept in mind, the presence of acute appendicitis during labor may not be suspected. The following case illustrates how acute appendicitis may develop at term in conjunction with labor.

## CASE REPORT

Mrs. D. A., 17 years of age, gravida I, registered at the Puunene Hospital Prenatal Clinic on February 20, 1941. Her last menstrual period began on July 18, 1940 and the expected date of delivery was April 25, 1941. Examination showed a pregnancy of about seven months duration in a normal nulliparous woman. The blood

Wassermann reaction was negative. She attended prenatal clinic five times during the remaining two months of her pregnancy and continued to be normal in all respects.

At 7:45 p.m. on the expected date of delivery, the patient was admitted to the hospital complaining of painful uterine contractions at five to ten minute intervals, lasting thirty to forty seconds. I examined her at 8:30 p.m. and assumed that she was in normal labor. She said she had had abdominal pain and uterine contractions since 3:00 p.m. The fetal heart sounds were heard in the left lower quadrant of the abdomen and were normal. Rectal examination revealed that the cervix was not dilated nor effaced and the head was not fully engaged. There was no vaginal discharge. There had been no vomiting or diarrhea. The temperature was 98.8° F. The patient was given an enema and labor was allowed to proceed.

At midnight the patient complained of constant pain in the right side of her abdomen. The uterine contractions were not so painful at that time and were coming at eight to ten minute intervals. I examined her at 1:00 a.m. and found her to be definitely tender on the right side of the abdomen at a point two inches above and to the right of McBurney's point. She was given 1½ grains of Seconal and slept at short intervals during the next six hours.

The patient was next examined at 7:00 a.m. and was still tender on the right side of the abdomen. Because of the distention of the abdomen by the uterus, it was impossible to tell whether there was any rigidity of the abdominal muscles or not. At this time the uterine contractions were fifteen to twenty minutes apart and lasted twenty to thirty seconds. A vaginal examination showed the cervix to still be uneffaced and undilated. A catheterized specimen of urine was normal. The white blood count was 13,680 with 84 percent neutrophils. A diagnosis of acute appendicitis accompanied by false labor was made and the patient was prepared for immediate surgery.

As a pre-operative medication and to stop labor, ¼ grain of morphine sulphate and 1/150 grain of atropine sulphate were given. The abdominal wall was infiltrated with 1 percent procaine over the point of maximum tenderness. The incision was made through the skin and fascia. The muscles were separated but were not cut. After opening the peritoneum, the cecum was located and the tip of the appendix was found to lie behind it. Ethylene anesthesia was given at this time, and with some difficulty the appendix was removed. The appendiceal stump was buried with a purse-string suture. The appendix contained an abscess with one-half dram of free pus in it. The incision was closed with chromic catgut and dermal sutures. No drain was used.

During the first post-operative day the patient was given four doses of 1/6 grain of morphine sulphate for discomfort. She was also given 1½ grains of Seconal

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<sup>1</sup> Scott, W. A.: Surgical Complications During Pregnancy and Labor, *Am. J. Obst. & Gyn.* 49:494 (April) 1945.



at bed time. She voided soon after surgery and took fluids well on the first post-operative day.

Thirty hours after surgery normal labor started. The patient was given 1/6 grain of morphine sulphate and 1½ grains of Seconal. The Seconal was repeated. After a labor of ten hours a viable male infant weighing seven pounds and four ounces was delivered by low forceps. Ether anesthesia was used for the delivery. It was necessary to do an episiotomy, which was repaired under local anesthesia.

Post-operatively, the patient's temperature did not reach as high as 100° F., except for one reading immediately after delivery, until the tenth post-partum day. At this time mastitis developed and it was necessary to dry the breasts. The patient went home on the twelfth post-partum day and made a normal recovery.

#### DIFFERENTIAL DIAGNOSIS

Right sided abdominal pain during pregnancy, labor and the puerperium may be caused by many other conditions besides appendicitis. False labor or true labor may accompany any of these and the underlying disease may not be suspected until too late. Pyelitis will cause tenderness and pain in the right side of the abdomen but there will also usually be tenderness over the right kidney and gross pus in the urine. If the placenta is situated in the right upper part of the uterus, a small area of separation may cause abdominal pain and tenderness in the appendiceal area. A placental infarct likewise may cause abdominal pain and tenderness in this area. These two conditions will usually have been preceded by some signs of late toxemia of pregnancy. The white blood count may be elevated in these conditions but the probability of its being elevated is not as great as it is in acute appendicitis. A right salpingitis may give symptoms and signs identical with those of appendicitis though the onset is usually different. The right ovary may become twisted on its pedicle during pregnancy, producing severe pain on the right side. I have operated on one such patient. Small bowel obstruction may give severe cramp-

like abdominal pain which may be mostly on the right side. A patient that is near term with small bowel obstruction will usually think labor has set in. Before obstruction is complete, distention may not be present, and it will be most difficult to arrive at the correct diagnosis. There will be no progress in labor in spite of the severe pains. Large doses of morphine will relieve these pains for relatively short periods. I gave one such patient three doses of ¼ grain of morphine sulphate in six hours' time. After ten hours her abdomen became distended and the correct diagnosis of small bowel obstruction was made. Usually these patients have had a recent abdominal operation or infection.

At the time of delivery there may be a tear into the right broad ligament with the formation of a hematoma. In the puerperium this may produce a mass in the right lower part of the abdomen. Vaginal examination will usually reveal the exact location of the mass and differentiate it from an appendiceal abscess. Labor may stir up a quiescent infection in the right fallopian tube which may go on to abscess formation and be indistinguishable from an appendiceal abscess. I recently had such a case except it was on the left side. Drainage was finally necessary.

#### SUMMARY

A case of acute appendicitis during early or false labor on the expected day of delivery is reported. Normal labor followed thirty hours after removal of the appendix.

Acute appendicitis at or near term will produce peritoneal and uterine irritation which may start uterine contractions. These contractions may develop into normal labor. Unless this sequence of events is kept in mind, the presence of acute appendicitis during labor may not be suspected until the appendix has ruptured.

# Hawaii

## MEDICAL JOURNAL

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### [EDITORIALS]

#### THE ONE YEAR RESIDENCE LAW

In the last issue of the JOURNAL, editorial opposition to the continuance of the one year residence requirement for medical licensure in Hawaii was expressed in some detail. This was done despite the fact that no decision in accordance with this view had been officially made by the Territorial Medical Association or any of its component societies. It was done partly in an effort to induce doctors to think about the matter and to formulate an opinion of their own regarding it.

Since that time there has been a great deal of discussion of the matter both pro and con, and presumably some of the members' views on the subject have crystallized.

Now we would like to follow the matter up by publishing letters from members of the Association or any other interested persons, expressing their views as to the desirability of continuing or of repealing this law. Letters will be published only if signed, but they will be published without the writer's signature if so desired.

We would like to have these letters before July first so that they may be published in the July-August issue. The House of Delegates has decided to conduct a poll of the entire Association to determine their collective opinions on the matter before the next session of the Legislature meets.

#### THE FRED IRWIN MEDICAL LIBRARY

Too often the appreciation of the life work of a man is expressed after he dies. If a man does a good job, upholds and raises the standards of his profession and leads in the planning and execution of sound community-betterment programs,

why should not his colleagues and coworkers pat him on the back and say "well done" and "thank you" while he is alive and well? It was with this feeling that the Hawaii County Medical Society recently voted unanimously to name its Library for Dr. Fred Irwin. It went further and asked the Managing Committee of the Hilo Memorial Hospital to combine its Medical Library with that of the Hawaii County Medical Society and allow the combined library to be called the Fred Irwin Medical Library and be housed in the Hilo Memorial Hospital. The Managing Committee agreed to this and today the Fred Irwin Medical Library is a fact. It is located in two rooms of the Hilo Memorial Hospital.

The physicians of the Island of Hawaii are proud of this library. It is a good one, though small. An active, hard-working Library Committee is rapidly making it into a very adequate library for this community. With the Index Medicus, and access to the Honolulu County Medical Library, this local library will insure the physicians of this Island a complete library service.

Fred Irwin was born in Shelburn, Nova Scotia, Canada, on November 28, 1875. He entered McGill University Medical School by matriculation examination in 1898, graduating in 1902. The remainder of that year he interned in obstetrics at New York Lying-In Hospital, coming to the Territory of Hawaii on March 17, 1903. He landed on the Island of Hawaii from a ship's boat at Laupahoehoe and proceeded to Hakalau, where he lived from 1903 to 1906, serving as plantation physician for Hakalau, Honomu and Laupahoehoe Sugar Companies. On June 1, 1906 he became physician for the Olaa Sugar Company and re-

maintained there until his retirement from active practice on January 1, 1940. In 1909, 1914, 1922 and 1930 Dr. Irwin went to the Royal Infirmary in Edinburgh, Scotland, for six-month periods of post-graduate study. He also spent some time at Mercy Hospital in Chicago with the late Dr. John B. Murphy, whom he greatly admired.

Dr. Irwin has always been active in Medical Society work, having held practically every office in the Hawaii County Medical Society, including its presidency. In 1930-1931 he was signally honored in being elected president of the Hawaiian Medical Society, the first plantation physician ever to be so recognized. Though he lived at Oloo, nine miles from Hilo, he was always an active member of the Staff of the Hilo Memorial Hospital and served as the chief of its medical staff in 1926, 1927, 1933, 1934, 1936, 1937, 1938 and 1939. He spent a great deal of time in this work and much of the progress of the Hilo Hospital is due to his efforts. Though many people contributed, it is generally recognized that without the special efforts of Dr. Irwin the new wing of the Hilo Memorial Hospital would still not be a reality. This wing is now indispensable in the Hilo Memorial Hospital program.

Though Dr. Irwin retired from active practice in 1940 he has continued to do useful and necessary medical work. He has been Medical Advisor of the Hawaii Medical Service Association since 1940 and from all reports has carried on that important work very satisfactorily. During the war he served as resident physician at Sacred Hearts Hospital, and since that hospital was closed he has been Medical Director of the Kuakini Hospital.

Dr. Irwin was always blunt, and at times antagonized others by this attitude. He never hesitated to give his stand on practically any subject. All cards were on the table and in the end he made friends by this attitude. There is no doubt that he grows in stature among his medical colleagues every day. The writer worked as his assistant for one year and though we did not always agree on every diagnosis or on every approach to our common problems, yet we were always able to find a common meeting-ground and every item of our working agreement was adhered to to the letter. Dr. Fred Irwin is that kind of man, and his colleagues on the Island of Hawaii are glad to name this library for him, dedicating it to the principle of Service of which he has consistently been a disciple.

H. M. PATTERSON, M.D.

## INTRAVENOUS MUSTARD GAS FOR LYMPHOBLASTOMA

The assumption that mustard gas damages animal tissue by releasing hydrochloric acid intracellularly has been shown during the past few years to be in error, according to a report by Major Alfred Gilman and Lieutenant Frederick S. Philips, Sn.C., U.S.A. (*Science* 103:409 [April 5] 1946). The action is really a mysterious inhibition of mitosis combined with primary nuclear damage, which resembles in many ways the effect of x-rays and gamma radiation. This statement represents an over-simplification of an extremely complex problem which has not yet been completely worked out.

Lymphoid tissue has been known for many years to be particularly sensitive to the effects of mustard gas; and when types of mustard gas became available which could be given in dilute solutions intravenously, it was natural to assay their effect on lymphoblastoma in mice. They proved extremely effective, though dangerous and never quite curative. Since then about 150 human cases of various types of lymphoblastoma and leukemia have been similarly treated, with highly encouraging results, especially in Hodgkin's disease. Leukemias have responded least well.

Research on this problem is definitely only beginning; the method is still no more effective than x-ray therapy; and considerably more dangerous. Hundreds of similar compounds will have to be investigated. But at least the method constitutes another beginning inroad on the problem of cancer control.

## DELINQUENCY, CRUELTY, TRUANCY, NEGLECT

A recent survey by the Child and Family Service indicates the high correlation between broken homes and problems of delinquency, truancy, neglect and cruelty. In two-thirds of the seventy-five families studied, the home had been broken by divorce, separation, death or remarriage. The study was made during a prosperous economic period, so that poverty as such was a minor factor, many families having monthly incomes of \$150 to \$250, twelve per cent earning more than \$250. The more significant factor was the large percentage of situations where mothers were working with no adequate plans made for the care of the children. Other methods of caring for children are at best poor substitutes for a physically and emotionally healthy family life.

These seventy-five families had been known more than twice as frequently to medical and



health agencies, as to authoritative and casework agencies combined. Eighteen per cent of them had been registered at the Tuberculosis Bureau. Only one family was originally referred to the Child and Family Service by a health or medical agency. This suggests that if there were a closer working relation between casework agencies and medical and health agencies, more effective use might be made of the total resources within the community.

HELEN H. ERDMAN

### "TUMOR"

"Tumor" was originally a Latin word meaning a mass. It has come a long way, however, since the time when its principal medical use was to designate one of the five primary signs of inflammation.

In modern colloquial medical jargon, it doesn't mean mass at all: witness the commonplace solecism, "tumor mass." This phrase does not mean, as an educated person might suspect, "mass mass." It means "*neoplastic* mass." Whether this in turn means something different from "neoplasm"—and, if so, what?—is not clear to us. We doubt if it is clear to those who use the phrase.

This use is derived from the original misuse of the word tumor to designate a neoplasm. Actually a neoplasm is merely one variety of tumor—one

caused by useless overgrowth of tissue and not by accumulation of inflammatory exudate, extravasated blood, dammed-back secretions, injected foreign material, or the like. It is a precise word, and a useful one. It at once makes clear two things: that continued enlargement may be expected, and that *malignant* neoplasm—cancer—is a possibility. The word tumor makes none of these things clear; it is not a bit more specific than the word mass; its only advantage, if it be an advantage, is that it has two syllables instead of one, and, being a comparatively technical word, it has a tendency to make its user feel that he has said more than if he had merely said "mass." He has not.

"Glory," said Humpty-Dumpty, "means 'there's a nice knock-down argument for you.'" It does, indeed—like "tumor" means "neoplasm."

### NOTES AND NEWS EDITOR

Dr. Laurence M. Wiig has joined the staff of the HAWAII MEDICAL JOURNAL as Assistant Editor. He will be in charge of the *Notes and News* section, which was formerly written by Dr. Edward Hornick, who is now in the Army.

Readers are urged to notify Dr. Wiig of any news items of interest for inclusion in this section. Suggestions for its expansion and improvement will also be welcome.

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# COUNTY SOCIETY REPORTS

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## REVIEW OF THE 56th YEAR OF THE MEDICAL SOCIETY IN HONOLULU

### President's Address

NILS P. LARSEN, M.D., *President:*

The account given you by the chairmen on the work of your committees covers the work of your society for the past year. It leaves nothing for me to say except to thank the chairmen for the whole-souled way they did their jobs. They achieved a record when one week before the annual meeting a written report from each one regarding his committee's activity was in the hands of your secretary. I also wish to thank the Board of Governors for their constant support, their active discussions, their willingness to present, and listen to, various ideas about each subject debated, without any show of ill will, rancor or impatience. Their work illustrates well the present trend of the "managerial revolution." It is another indication of the new era slowly shaping. The big boss, the big owner, "the king can do no wrong" idea is rapidly passing. Group thinking is better than the thinking of any one individual, no matter how brilliant. The age of dictators is passing. They have no place in a cooperative society. Your Board of Governors worked in that spirit of tolerance and functioned well. It is important to keep on that body doctors representing various viewpoints.

Recently I have read "The Summing Up" by W. Somerset Maugham. Maugham was a doctor until his literary work established him as a writer. When he was old, he looked back over his life and wrote "The Summing Up." It is an analysis of what he saw, said and did in life. As doctors, we might well take one of his paragraphs to heart, i.e.: "It did not seem to me enough only to be a writer. The pattern I had designed for myself insisted that I should take the utmost part I could in this fantastic affair of being a man." As doctors it does seem it should be our duty to do our utmost to serve our community. With the educational opportunities and advantages we have had, we should have evolved from the shortsighted philosophy of "me for myself and the devil take the hindmost." The best in the art of healing has always stood for "how much can I give," not for "how much can I get." I can report that your society officers and the Board of Governors have tried to do this as well as they could.

Of problems worked on, they tried to coordinate differences between the Board of Health and our Society members. Many criticisms lost their importance after mutual discussion. The Board of Health recognized the danger of possible abuses. It was evident we also were not without sin.

We took an active interest in the statehood hearings and brought before the Congressional Committee the fact that our Society had many members as well as officers working happily together and representing in their racial background most nations of the world and particularly of the Pacific Area. Racial and religious intolerance and bigotry must pass if we are to attain peace in the world. Too many groups still represent such bigotry. We wanted to help convince Washington that the Bilbo spirit did not dominate our Society. Hawaii can be a light shining into the future if we accept the feasibility of racial harmony as illustrated by our membership.

One other matter I should present for your fervent thinking is the full coverage medical and hospital plan at present being developed by the Governor's Committee with the hope that it may develop in shape enough to present to the next legislature. Some of our members have expressed themselves to the effect that we should leave things as they are. Don't disturb the status quo, they say. Unfortunately this is not possible. Politicians are determined that health bills shall be passed. Unions are insisting on health clauses. John L. Lewis is willing to scuttle normal reconversion for it and blandly demands 60 million dollars to run his own health plans. Is there anyone in the Society who believes that the present union leadership will evolve a broad medical plan that will consider in full fairness doctor and patient as well as taxpayer? Justice is not yet an important word in the vocabulary of union leaders. The problem is not how can we keep out of this argument, but how can we prevent the present good medical and hospital services from being destroyed and how can we help to extend them to everyone at a cost they can afford. There are a few essentials that safeguard good personal service. These are usually omitted in the political health bills. Supplying medical care is not like selling tin cans. Emotional problems which lie behind perhaps 75 per cent of physical ills cannot be handled at so many per dozen, nor in any standard way for each patient. If we would legislate for good health we would have a better chance of attaining improvement by



giving to everyone the chance to obtain all the protective foods needed—milk, eggs, fruit and vegetables. Why not? That can be legislated and controlled easier than good medical service. It would be certain to cut down illness days. Why only legislate against medical free enterprise?

The Governor's Committee plan insures the free choice of physician. It gives the patient an opportunity to pick his own medical confidant. Medicine is such a personal service that the best results depend on the trust and confidence a patient has in his doctor. The free choice of a hospital would also be a requisite. The standby costs of all hospitals should be borne by all and not by the relatively few who are actually stricken. The doctor by this plan would be stimulated to do his best, since he would get "fee for service." The harder he worked the more he would earn. He wouldn't be guaranteed a salary, he would have to attract his income by good service. He could not afford to close his desk promptly at 4 p.m. People suffer throughout the night. Business can wait until morning, but the suffering patient cannot wait. All citizens would be listed each year in income brackets A, B, C, etc. Each would carry a card to indicate his bracket. A level of say \$100 a month income or below for a man, his wife and three children would constitute 100 per cent free service. In brackets rising from this, the amount paid by the government would decrease by 10 per cent. In the B bracket the patient would pay 10 per cent, the Territory 90 per cent. In the C bracket the patient would pay 20 per cent, the Territory 80 per cent, etc., until when the income reached \$500 a month or above the patient would pay all his medical expenses. The level of remuneration would be the one used by the Hawaii Medical Service Association. The patient in all brackets, however, would benefit by the lowered hospital costs. The method of raising money for such a plan is being considered. It is really not yet a plan but an idea to which everyone should give serious thought. It is in the wind that changes in our medical system will occur. Our hope is that if all cooperate we can continue to maintain what we really desire—excellent and constantly improving service to everyone who is sick.

The Board also tried to stimulate more membership interest in The Queen's Hospital Thursday morning Clinics. This active review of medical problems is a continuous post-graduate course that the membership can hardly afford to miss.

Your chairman, as a member of the Steering Committee of the Chamber of Commerce Post-War Health Program, would also like to call your attention to the splendid work of many of the doc-

tors on the various health committees. The idea of collecting, discussing and compiling all available facts and ideas regarding every phase of health activity is indeed a great step toward further progress in health matters. These volumes will be excellent data for anyone desiring comprehensive knowledge of our health picture. With this tabulation of present facilities, immediate needs and long range hopes, material is ready for any legislator to get professional authority for the needs to improve our community health. It should be an excellent antidote for anyone who has the habit of drooling about, "Why didn't somebody do something?" When completed we hope our library will have the full files available for study by any member. It is a useful piece of work and should be very helpful.

Another project discussed but not carried to vote was to have a running inventory of all illnesses treated in doctor's offices. Such a morbidity record would be unique and would give a true index as to the actual health of the community. With the Board of Health tabulating machines and statistical department, such a record could be fully used and would be helpful to every doctor. It would be a constant check on our health situation. We believe it is feasible.

During the year two very deserving members have been promoted to Honorary Membership—namely, James Morgan and George Straub. We note with regret that during the past year the Society has lost by death three members—Dr. Arthur Hodgins, Dr. Walter Chinn and Dr. Zen Sato.

In closing may I officially express appreciation for the excellent service of your very efficient secretary, Mrs. Edith Bennett. She is the right person in the right place and typifies well in her kindly spirit and tireless activity and willingness to help the spirit of medicine that we are supposed to follow, "Service above self."

### Officers' Reports\*

MAURICE GORDON, M.D., *Corresponding Secretary*:

The total membership for all classes as of February 28, 1946 is 317. Members called to active duty and not engaged in private practice are exempt from the payment of dues and assessments until the next semi-annual dues following the expiration of their military service. There are 18 such members. The total membership on which dues to the Hawaii Territorial Medical Association are to be paid for the year 1946-1947 is 233.

New members accepted during the year—Regular: Drs. J. Wong, Wakatake, Akita, Kobayashi, Florine, Kainuma, Sumida, Tashima, C. M. Mirikitani, Kohatsu, Corboy, Berk, Meller, Higashi, R. A. Kimura, Miyamoto, Hunter, Hata (by transfer from Kauai), and Izumi (by transfer from Maui). (During March, 1946 Drs. M.

\* In abstract.—Ed.

# PUBLIC RELATIONS

## Medical Society Greet Doctors Who Served In Armed Forces

Not all could answer the roll call last night when the Honolulu County Medical Society met at the Mabel Smith Auditorium to greet the Tripler Doctors. The meeting was held at 7:30 p.m. and was attended by a large number of the society's members and guests. The Tripler Doctors, who served in the armed forces during World War II, were the guests of honor at the meeting. The society's president, Dr. H. H. Anderson, welcomed the guests and presented a certificate of appreciation to each of them. The Tripler Doctors were: Dr. Robert F. Bailey, Dr. Morton E. Berk, Dr. Alfred J. Burden, Dr. T. Alan Casey, Dr. H. M. Chandler, Dr. H. C. Chang, Dr. Archie Chang Ming, Dr. E. K. Chung Hoon, Dr. Phillip M. Corboy, Dr. Thomas W. Cowan, Dr. D. S. Dopp, Dr. Richard Durant, Dr. Raymond Dunsenbach, Dr. A. M. Ecklund, Dr. R. B. Faus, Dr. John M. Felix, Dr. James F. Fleming, Dr. Clarence Frank, Dr. F. L. Giles, Dr. Rogers Lee Hill, Dr. Louis Hirsch, Dr. Edmund Ing, Dr. W. S. Ito, Dr. Richard Kainuma, Dr. Lester Kashiwa, Dr. Robert Katuki, Dr. I. A. Kawasaki, Dr. Wallace Kawooka, Dr. E. K. S. Lau, Dr. J. F. C. Lau, and Dr. Leslie Luke.

**HONOLULU DOCTORS HONORED**—At the meeting of the Honolulu County Medical Society last night, the Tripler Doctors were honored for their service in the armed forces during World War II. The society's president, Dr. H. H. Anderson, welcomed the guests and presented a certificate of appreciation to each of them. The Tripler Doctors were: Dr. Robert F. Bailey, Dr. Morton E. Berk, Dr. Alfred J. Burden, Dr. T. Alan Casey, Dr. H. M. Chandler, Dr. H. C. Chang, Dr. Archie Chang Ming, Dr. E. K. Chung Hoon, Dr. Phillip M. Corboy, Dr. Thomas W. Cowan, Dr. D. S. Dopp, Dr. Richard Durant, Dr. Raymond Dunsenbach, Dr. A. M. Ecklund, Dr. R. B. Faus, Dr. John M. Felix, Dr. James F. Fleming, Dr. Clarence Frank, Dr. F. L. Giles, Dr. Rogers Lee Hill, Dr. Louis Hirsch, Dr. Edmund Ing, Dr. W. S. Ito, Dr. Richard Kainuma, Dr. Lester Kashiwa, Dr. Robert Katuki, Dr. I. A. Kawasaki, Dr. Wallace Kawooka, Dr. E. K. S. Lau, Dr. J. F. C. Lau, and Dr. Leslie Luke.

**The Honolulu County Medical Society meeting Friday Night, December 7th, will be an "Uoha" to "The Doctors Who Went to War." The Uoha Naval Hospital is putting on an excellent program beginning with a Vary Film on "Pearl Harbor, Dec. 7, 1941."**

**Statement From Honolulu Medical Society**

The Honolulu County Medical Society is pleased to announce that the Tripler Doctors, who served in the armed forces during World War II, will be the guests of honor at the society's meeting on Friday night, December 7th. The meeting will be held at the Mabel Smith Auditorium and will begin at 7:30 p.m. The society's president, Dr. H. H. Anderson, will welcome the guests and present a certificate of appreciation to each of them. The Tripler Doctors are: Dr. Robert F. Bailey, Dr. Morton E. Berk, Dr. Alfred J. Burden, Dr. T. Alan Casey, Dr. H. M. Chandler, Dr. H. C. Chang, Dr. Archie Chang Ming, Dr. E. K. Chung Hoon, Dr. Phillip M. Corboy, Dr. Thomas W. Cowan, Dr. D. S. Dopp, Dr. Richard Durant, Dr. Raymond Dunsenbach, Dr. A. M. Ecklund, Dr. R. B. Faus, Dr. John M. Felix, Dr. James F. Fleming, Dr. Clarence Frank, Dr. F. L. Giles, Dr. Rogers Lee Hill, Dr. Louis Hirsch, Dr. Edmund Ing, Dr. W. S. Ito, Dr. Richard Kainuma, Dr. Lester Kashiwa, Dr. Robert Katuki, Dr. I. A. Kawasaki, Dr. Wallace Kawooka, Dr. E. K. S. Lau, Dr. J. F. C. Lau, and Dr. Leslie Luke.

**Honolulu County Medical Group On Record Favoring Stated**  
Following is a copy of the statement made by the Honolulu County Medical Society at its meeting on December 7th, 1941, in support of the proposed establishment of a new medical school in Honolulu. The statement was read by the society's president, Dr. H. H. Anderson, and was as follows: "The Honolulu County Medical Society is in favor of the establishment of a new medical school in Honolulu. We believe that such a school is necessary for the betterment of the medical profession in this territory and for the benefit of the people. We urge the territorial government to take prompt action to establish such a school."

## The Honolulu County Medical Society Salutes The Territorial Doctors Who Served With The Armed Forces During World War 2

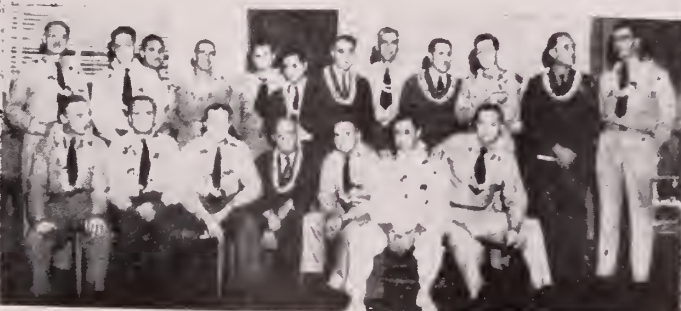
- Emory H. Anderson
- Robert F. Bailey
- Morton E. Berk
- Alfred J. Burden
- T. Alan Casey
- H. M. Chandler
- H. C. Chang
- Archie Chang Ming
- E. K. Chung Hoon
- Phillip M. Corboy
- Thomas W. Cowan
- D. S. Dopp
- Richard Durant
- Raymond Dunsenbach
- A. M. Ecklund
- R. B. Faus
- John M. Felix
- James F. Fleming
- Clarence Frank
- F. L. Giles
- Rogers Lee Hill
- Louis Hirsch
- Edmund Ing
- W. S. Ito
- Richard Kainuma
- Lester Kashiwa
- Robert Katuki
- I. A. Kawasaki
- Wallace Kawooka
- E. K. S. Lau
- J. F. C. Lau
- Leslie Luke



**CITIZENS!!**  
Don't Forget Them  
as They Are Returning  
to Practice

- R. J. Manafield
- Colin C. McCorriston
- J. McClellan
- R. J. Mermord
- R. D. Millard
- Thomas N. Mousman
- Douglas Murray
- Joseph Palma
- David L. Pang
- A. Sumner Price
- O. D. Pinkerton
- Harold M. Sexton
- R. S. Steffe
- Carl Tesmer
- F. W. Thompson
- C. W. Trexler
- Fook Hing Tong
- Volt H. Tom
- Leslie Vasconcelles
- B. O. Wade
- Garson E. Wall
- W. M. Walsh
- J. E. Walther
- F. B. Warshawer
- R. T. West
- Paul Wiig
- C. L. Wilbar, Jr.
- Paul Withington
- James T. S. Wong
- Richard Won Sang Yoo
- Lester P. K. Yee

\* Killed in action at Guadalcanal



**Santo Tomas Grad Gives Talk Here**  
Dr. Frank Wang, Santo Tomas Graduate, gave a talk at the Honolulu County Medical Society meeting on Friday night, December 7th. He discussed the medical conditions in the Philippines and the work of the Santo Tomas Hospital. He also mentioned the recent discovery of a new extract from a plant which has been found to be effective in the treatment of certain types of cancer.

**Cone Leaf Extract Is New Discovery In Wound Healing**

Recent discoveries for wound healing made by army researchers will mean a new secret on the rate and simplicity of treating wounds. The discovery was made by Dr. Frank Wang, Santo Tomas Graduate, who gave a talk at the Honolulu County Medical Society meeting on Friday night, December 7th. He discussed the medical conditions in the Philippines and the work of the Santo Tomas Hospital. He also mentioned the recent discovery of a new extract from a plant which has been found to be effective in the treatment of certain types of cancer.

**Dec. 7 Memorial Planned Tonight By Medical Society**

The Honolulu County Medical Society will hold a memorial service on Friday night, December 7th, to commemorate the attack on Pearl Harbor. The service will be held at the Mabel Smith Auditorium and will begin at 7:30 p.m. The society's president, Dr. H. H. Anderson, will preside over the service.

**NYU Professor Talk To Medical Group**

Dr. Frank Wang, NYU Professor, gave a talk to the Honolulu County Medical Society on Friday night, December 7th. He discussed the medical conditions in the Philippines and the work of the Santo Tomas Hospital. He also mentioned the recent discovery of a new extract from a plant which has been found to be effective in the treatment of certain types of cancer.

**Civilian Doctors, Red Cross Ready When Japan Attacks**

The Honolulu County Medical Society, the Red Cross, and the civilian doctors are ready to assist in the event of a Japanese attack on the Hawaiian Islands. They have organized a plan for the evacuation of the population and the provision of medical aid. The plan includes the establishment of a temporary hospital in the event of an attack.

**DOCTORS ATTEND**

A special meeting on influenza will be held at the Mabel Smith Auditorium on Friday night, December 7th. The meeting will be held at 7:30 p.m. and will be attended by the Honolulu County Medical Society and the Red Cross. The meeting will discuss the latest information on influenza and the steps that should be taken to prevent its spread.

**DOCTORS WELCOME**

The Honolulu County Medical Society is pleased to welcome the Tripler Doctors, who served in the armed forces during World War II, to the society's meeting on Friday night, December 7th. The meeting will be held at the Mabel Smith Auditorium and will begin at 7:30 p.m. The society's president, Dr. H. H. Anderson, will welcome the guests and present a certificate of appreciation to each of them.

**Medical Society He Gives Indorsement To Hospital Drive**

The Honolulu County Medical Society has given its indorsement to the drive to build a new hospital in Honolulu. The society's president, Dr. H. H. Anderson, announced this at the society's meeting on Friday night, December 7th. He stated that the society believes that a new hospital is necessary for the betterment of the medical profession in this territory and for the benefit of the people.

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## DOCTORS, ATTENTION!

special meeting on Influenza will be held at the Mabel Smith Auditorium, 4:30 to 5:30, Friday, December 28th, to hear Major J. H. Milestone report on recent studies in the Epidemiology of Influenza.

ALL DOCTORS WELCOME

**Honolulu County Medical Society**

## I Warned Of County Medical Meets Next Fri

The monthly meeting of the Honolulu County Medical Society will be held at the Mabel Smith Auditorium on Friday, December 7th. The meeting will be held at 7:30 p.m. and will be attended by the society's members and guests. The society's president, Dr. H. H. Anderson, will welcome the guests and present a certificate of appreciation to each of them.

## Announcement

All service and visiting doctors are cordially invited to the meeting of the Honolulu County Medical Society on Friday, January 4-7, 7:00 P. M. The meeting will be held at the Mabel Smith Auditorium and will begin at 7:30 p.m. The society's president, Dr. H. H. Anderson, will welcome the guests and present a certificate of appreciation to each of them.

## Hawaii's Health Record Cited In Statehood Case

The health record of Hawaii is cited in the case for statehood. The record shows that Hawaii has a high standard of health and a low incidence of disease. This is evidence of the effectiveness of the medical services provided in Hawaii. The record also shows that Hawaii has a strong medical profession and a well-developed medical system. This is evidence of the progress made in the development of Hawaii.

## Doctors Who Served In Armed Forces

The Honolulu County Medical Society is pleased to welcome the Tripler Doctors, who served in the armed forces during World War II, to the society's meeting on Friday night, December 7th. The meeting will be held at the Mabel Smith Auditorium and will begin at 7:30 p.m. The society's president, Dr. H. H. Anderson, will welcome the guests and present a certificate of appreciation to each of them.

## Medical Discoveries

The Honolulu County Medical Society is pleased to announce that the Tripler Doctors, who served in the armed forces during World War II, will be the guests of honor at the society's meeting on Friday night, December 7th. The meeting will be held at the Mabel Smith Auditorium and will begin at 7:30 p.m. The society's president, Dr. H. H. Anderson, will welcome the guests and present a certificate of appreciation to each of them.

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Mori, Shimamura and Uchida were added.) Service: Drs. Boysen, Cole, Grant, Grimm, Hatlelid and Lynam. Honorary (formerly regular) members: Drs. Morgan and Straub.

At the December meeting 65 doctors of the Territory were honored for their participation in the armed services during World War II.

HARRY L. ARNOLD, JR., M.D., *Treasurer:*

At the close of the fiscal year, February 28, 1946, the accounts showed the following balances:

1. County Society General Fund.....	\$ 6,459.23
2. Medical Library General Fund.....	269.06
3. Library Endowment Fund	
a. Savings account .....	\$10,870.11
b. Bishop Trust Co. ....	378.29
c. Investments .....	33,260.85
d. Pledges unpaid .....	480.00
	<hr/> 44,989.25
Total assets.....	\$51,717.54

The County Society funds showed an increase of \$3,423.81 during the year and \$17,476.35 has been added to the Library Endowment Fund.

A detailed report from the auditor is submitted to complete this report. The treasurer calls attention to the fact that the auditor had no comments or suggestions to make this year, as he found the accounts all in good order and reflecting a true picture of the finances of the society.

### Reports of Committee Chairmen\*

NATHANIEL M. BENYAS, M.D., *Library Board:*

The Library Committee of the Honolulu County Medical Society was requested by the Library Board to continue to manage library affairs as in the past. This Committee was appointed by the President of the Medical Society subject to approval of the Library Board.

During the fall, the Board made an effort to secure additional contributions to the Library Endowment Fund. Letters were sent to selected firms and individuals asking their support of the Library. Doctors who had previously made no contribution or pledge were again solicited. From these sources \$4,400 was contributed by local firms and \$1,370 by doctors. At the present time there are only 63 doctors who have failed to contribute something to the Endowment Fund, and we trust these individuals will remember to do so in 1946.

Library membership rules have been defined, and doctors who are members of the Hawaii Territorial Association automatically become regular library members on payment of their annual County Society dues. The Nurses' Association has agreed to contribute about \$100 annually to the running expenses, in addition to their pledge of \$5,000 to the Endowment Fund, to be paid over a five year period. Hospitals with staffs which include internes and student nurses have been asked to take a contributing membership at not less than \$100 annually. Doctors and nurses of the armed forces stationed in this area are now asked for a membership fee of \$5.00 annually if they wish to borrow books and journals. The use of material for reference in the Library is open to them and to other qualified research workers as usual.

The Endowment Fund now amounts to \$44,989.25, an increase of \$17,476.35 in the past year. We wish to ex-

tend special thanks to all the doctors serving on the staffs of the Kuakini, St. Francis, Kapiolani, Children's and Queen's Hospitals. In payment for the care of indigent patients by the staff doctors at these hospitals, the Library Endowment Fund has benefitted during the year to the extent of \$11,248.72, which was turned over to the Fund through the County Medical Society. Again we express our gratitude to Dr. Thomas Mossman who made this arrangement possible. Other increases in the Fund were \$730.12 in dividends on investments and \$16.45 interest on savings account. Expenses charged against the Fund were \$11.62 for taxes, \$27.32 commission to the Bishop Trust Company, and \$250 to the attorneys for service in preparing trust instrument and tax advice.

On March 14 the Bishop Trust Company advised us that "an analysis of the endowment fund . . . shows an average yield of 3.5% on current market values. However, basing the return on the actual cost price of the investments, we obtain a yield of 3.7%. Considering the fact that close to half the fund is in War Savings Bonds yielding only 2.5%, the overall yield is rather good under existing conditions."

GARDNER BLACK, M.D., *Forms of Medical Practice:*

The problem of contract practice in relation to the new Hawaiian Sugar Planters' Association ruling which gives free medical care to all plantation employees was discussed at the only meeting held. The committee decided the plan did not constitute a breach of ethics as defined by the American Medical Association and recommended that no action be taken against the plantation physicians.

Your chairman wishes to stress the importance of the Committee on Forms of Medical Practice and the duty of its members to attend necessary meetings when problems are referred to the Committee.

CLARENCE E. FRONK, M.D., *Workmen's Compensation:*

Two cases have come before our board for adjudication: (a) a minor case in which the doctor was upheld and our findings amicably received by the insurance carrier, and (b) a dispute between the doctor concerned and the insurance carrier relative to what the insurance carrier thought was an over-charge. In this case the insurance carrier was upheld, also to the satisfaction of the doctor concerned.

Your committee believes that the present fee schedule is entirely satisfactory to a large majority of the physicians.

HOMER IZUMI, M.D., *Public Relations:*

It was the opinion of the committee members that more publicity concerning the activities and accomplishments of the medical profession was necessary. It was suggested that greater effort be made to invite to our meetings members of the medical units of the services and to urge them to participate in our program. It was the unanimous opinion that a more extensive publicity and public relations program should be attempted.

During the past six months this committee has been responsible for publishing 45 newspaper articles and pictures concerning the activities of the society or its members. Notable among these articles were those publicizing the December Seventh commemorative meeting, the Society's attitude on socialized medicine and the Society's participation in the statehood hearings. In order to increase attendance at medical meetings and to invite

\* In abstract.—Ed.



medical members of the services, 16 paid newspaper display announcements were inserted during the same period. Questioning revealed that nearly all those attending the meetings had observed the newspaper notices. Attempts have been made to publicize the existence of the Hawaii Medical Service Association.

A record in the form of a scrapbook has been started and kept by our secretary, Mrs. Bennett, and is to be considered part of this report. A reproduction of random samples of articles is likewise submitted.

Since this is the first report of a newly established committee, its six months' existence leaves room for much improvement. Other mediums of fostering better publicity and public relations have been discussed but not tried. Among them, the use of the radio to sponsor forums and series of talks on medical subjects of community interest has been suggested. Financing such a program would have to be considered unless business organizations could be interested in its support. This committee feels that repetition and continuity are essential in any satisfactory public relations publicity campaign. In order to further expand the program this committee recommends consideration be given to securing the services of an individual trained in this type of work and to maintain him on a basis which would allow devotion of his entire time, if necessary, to the development and continuation of such a program.

JOSEPH PALMA, M.D.,

*Hawaii Medical Service Association:*

The Hawaii Medical Service Association has continued during the year, 1945-46, to develop its program of providing prepayment medical and hospital care to our community. In the first few months following the end of the war the plan suffered a slight loss in membership, but that has been regained by expansion in local groups so that the total coverage is now over 10,000. Our plan now has reserves amounting to \$130,000, a guarantee against unusual demands which may be made upon the Association.

Outer island plans are now under way. The Kauai Medical Service Association has been organized. Nearly 1,000 members are participating. Mr. Arthur Achor is manager of the plan and a representative group of community leaders are on the Board headed by President John Watkins. The plan is gradually increasing its coverage. This month the Hilo Medical Service Association is organizing. Mr. James Carroll is serving as manager and the community board has been formed with Mr. G. A. Bush as president. Enrollment of groups is progressing and it is planned to inaugurate the service on April 1, 1946. The outer island plans are an integral part of the Hawaii Medical Service Association with free choice of physician and hospital provided to all members. Further extension of the program is planned. To meet the demands of community groups, veterans organizations and others, our medical service plan set-up must be Territory-wide. We are moving in that direction.

The medical and hospital benefits provided under our policy are now undergoing revision with the intent of the Committee, which has been set up by the Board of Directors, to increase the benefits to our members. The total liability which the Plan assumes in cases of serious illness is going to be increased. The waiting periods for service are going to be shortened. There is going to be

some revision in the rate structure. These changes will be put into effect on June 1, 1946, after consideration by the Honolulu County Medical Society. As we expand our membership, we should increase our benefits and broaden the coverage provided.

Much assistance can be given by members of our Society in encouraging groups to participate in this program. It has succeeded largely because of our support. It is sturdy in its financial structure and its provision of adequate payment to doctors and hospitals is recognized. The Council on Medical Care and Public Relations of the American Medical Association has called 1946 the "year of action." We plan to continue our support to the Hawaii Medical Service Association because it offers, on a voluntary basis, an opportunity for people in Hawaii to budget their medical and hospital bills.

JOSEPH PALMA, M.D., *Post-Graduate:*

Dr. Chauncey D. Leake, vice-president of the University of Texas, Medical Branch, has accepted an invitation to conduct a series of post-graduate lectures in Honolulu. He will address the Territorial Medical Association on May 3 and will lecture to the Honolulu County Medical Society at 4:30 on May 6, 7, 9, 10, 13, 14, 16 and 17. He will also meet the other county societies on their respective islands during his visit.

A questionnaire regarding a series of late afternoon medical movies to be borrowed from the libraries of the A.M.A. and The American College of Surgeons showed a fairly large number of doctors in favor of such continuous post-graduate work. However, time did not allow us to get this activity under way.

HASTINGS H. WALKER, M.D., *Library:*

In our endeavor to make available to the doctors and nurses of the community as complete a library service as possible, we have, during the past few years, enlarged the extent and scope of the library collection to a considerable degree. During the past year the library continued to grow and its services were further expanded. Our major projects comprise the following:

1. Purchase of new books.
2. The completion of journal files (by new subscription and through the Medical Library Association Exchange).
3. Preparation of bibliographic material.
4. The collection of biographic material.
5. Building of a historical file (newspaper clippings, letters, etc.).
6. The binding of complete volumes of medical journals as rapidly as possible.

*Acquisitions*

One hundred forty-seven new books were added during 1945, with an average circulation of 10 to 15 on each new book acquired. Total books in collection—1,780.

One hundred eighty journals are currently received and over 300 partial files are being completed rapidly.

During the year over 5,000 issues of back files of medical journals were received, chiefly from the Medical Library Association Exchange, at the cost of postage only.

A number of individuals made donations of books or journals to the library for which we wish to express our appreciation and thanks at this time. The Tuberculosis Association of the Territory of Hawaii, as well as the Territorial Hospital Association and the Honolulu Hospital Council have donated sums of money for the acquisition of books in fields of tuberculosis and hospital administration.

### Circulation

There has been a steady increase in the use of the library by the doctors and nurses of the community. Ninety-six Honolulu physicians are now registered borrowers of books and journals. One thousand two hundred ninety-five visits were made by physicians during the year—a notable increase over previous years. There are 217 nurses (including student nurses) registered, with a total of 1,560 visits. Two hundred sixty-three Army and 140 Navy doctors borrowed material during the year, with a total of 3,525 visits. Three hundred eighty-seven laymen applied to the library for assistance in obtaining medical information. The total attendance in 1945 was 6,766, as compared with 6,660 for 1944. There was a total of 4,005 books and journals borrowed and 10,901 books and journals used in the library. One hundred thirty-two bibliographies were prepared. Calls for research service averaged from two to three daily.

### Expansion

Our arrangements for book binding on a part-time service basis have continued throughout the year, with a total of 128 journals bound and 25 books repaired or rebound.

Your committee is seriously concerned over the fact that nearly all available stack space is now filled and that further expansion will be necessary to accommodate future growth of the book and journal collection. It is our urgent recommendation, therefore, that the Society give consideration at an early date to plans for expansion of the library.

### Budget

Your committee herewith submits a budget for the year 1946, as approved by the Library Board of Governors:

#### ESTIMATED BUDGET, 1946

Salaries .....	\$3,900
Binding .....	960
Telephone .....	150
Supplies and Equipment .....	300
Postage .....	300
Books and Journals .....	1,500
Miscellaneous .....	200
Taxes .....	115
	<hr/> \$7,425

#### ESTIMATED INCOME, 1946

Surplus 1945 .....	\$ 275
Nurses' Association .....	100
H.T.M.A. ....	500
Appropriation from Honolulu County Medical Society ....	6,400
	<hr/> \$7,425

Your committee has taken great pleasure in its work with the library during the year, and wishes at this time to acknowledge the extremely valuable service which Mrs. Hill, Librarian, has performed at all times.

#### SAMUEL L. YEE, M.D., *Program:*

On October 5, 1946 a panel discussion was held on the subject: How can we lower the cost of being sick and simultaneously raise the standards of medical and hospital care? This proved to be a topic of great interest and a large number of those in the audience shared in the discussion, which was led by the Board of Governors.

The November 9 meeting was held in conjunction with the annual meeting of the Territorial Association

of Plantation Physicians. The program consisted of a symposium on fractures and a symposium on obstetric care. These papers were published in the January and April issues of *Plantation Health*.

The outstanding program was the commemorative meeting on December 7, honoring the doctors from Hawaii who served in the armed forces during the war. It seemed particularly fitting that this program was presented by the Navy doctors from Aiea Hospital. The papers that evening were entitled: Surgery of the Sympathetic Nervous System, Recurrent Acute Pancreatitis, Internal Derangements of the Knee Joint, and Acute Pericarditis Simulating Coronary Thrombosis.

A special meeting was held on the afternoon of December 28, at which Major Milstone discussed the epidemiology of influenza.

The program for the January 4 meeting was presented by the staff of Tripler General Hospital (Army). Major Koepsel read a paper on wound handling and wound healing and Dr. Roman-Vega gave a talk on anesthesia.

On February 7 two members of our own society, Dr. Faus and Dr. West, described their own experiences in in the medical corps of the army and navy. Leahi Hospital staff presented a program on tuberculosis and Dr. Marks discussed the Board of Health program of mass x-ray surveys.

The March 7 meeting was devoted to original papers by members of the society as follows: Present Status of the Venereal Disease Control Program, by Dr. Allison, Influenza Epidemic of 1945, by Dr. Berk, Epilepsy, by Dr. Meller, and Incidence of Malignancy in the Territory, by Dr. Buzaid.

We have tried in the past year to have topics representing all branches of medicine—surgery, medicine, orthopedics, x-ray, etc. We have been fortunate in having distinguished members from the army and navy medical corps, which I believe has added to the quality of the meetings. Because of requests from certain members of our society that we present more papers from our own members, one such meeting was planned. I particularly wish to thank Dr. Larsen for all he has done to make the programs a success.

*Recommendations:* (1) That we continue the idea of a movie preceding each scientific session. (2) That we try to bring to the Society as many distinguished visitors from the mainland as may be present in Honolulu at the time of our meetings. In this respect we need the kokua of the whole society. (3) That the society continue to underwrite the beer collation to promote good fellowship.

[The Society was proud of the record of the Preparedness Committee, which ceased to function following V-J Day. The following report by its chairman includes the activities of 1944 and the concluding report of 1945.]

#### H. L. ARNOLD, M.D., *Preparedness:*

##### 1944

The activities of the emergency medical services for the year 1944 have been confined to the drastic reductions in their scope justified by the improvement in the military situation and made imperative by the cut in the budget.



### *Aid Stations*

All first-aid stations in the City were closed except the ones at Kaahumanu School and at Pearl City and Kailua. Later in the year, Kailua was turned over to the City and County physician for operation, and the Pearl City and Kaahumanu stations were closed in September. As a substitute for the protection afforded by these stations, three zone headquarters were set up and mobile units organized, this being completed in October. These mobile units, supplies and equipment, are kept packed in ambulances ready to be dispatched should the zone medical director concerned call for one. It is thought that they will be adequate to care for any major incident, whether caused by enemy action or by accidents.

### *Hospitals*

As of June, 1944, Sacred Hearts Hospital was closed and the building returned to the Sisters. The supplies and equipment were taken to the warehouse. The Polio Hospital was closed in June of 1944. Manoa Hospital, never having been opened, was turned over largely to the American Red Cross as a dressing center but is being held as a potential hospital if an emergency should make such a thing necessary. Shriner's Annex has been set up as an emergency hospital with a capacity of 100 beds, and on December 17, 1944, the volunteer staff attached to the hospital were invited to inspect it. This institution provides a safety valve for the presently somewhat overloaded hospitals, which might be made necessary by an epidemic or explosion or fire. As of December 31, 1944, Wahiawa Emergency Hospital was transferred to the Wahiawa Community, the supplies and equipment being on loan until the Surplus Property Division of the Federal Government has time to make the final transfer.

### *Outside Island Hospitals*

On Kauai, Huleia, Waimea and Makaweli Hospitals, which had been turned over to the Army on loan, were returned to the Office of Civilian Defense, and the supplies and equipment have been withdrawn and are being disposed of.

Baldwin Hospital and Maunaolu (Malulani) on Maui have also been closed.

Olaa Hospital on Hawaii was turned over to the Olaa Sugar Company in May of 1944.

### *Transfer of Hospital Supplies and Equipment*

The hospital supplies and equipment from all of the Office of Civilian Defense hospitals have been largely turned over to Territorial, City and County and private eleemosynary institutions on what might be called a "lend lease" basis, the final disposition of the ownership of the property being left to the Surplus Property Division. Supplies and equipment which were deteriorating were surveyed and given to such institutions. Other equipment which had no commercial value was also surveyed and donated. The medical departments of the Army and Navy have taken over considerable quantities of surplus supplies and equipment for their own uses, by transfer of funds from the department concerned to the Interior Department. The supplies and equipment furnished by the City and County have been returned to the City and County minus the inevitable deficits accruing from two years of operation. Forty large and 105 small evacuation medical cases which had been distributed over the island were collected and the materials consolidated and disposed of during the year.

### *Nurses from Sacred Hearts Hospital*

The nurses from Sacred Hearts Hospital, who were willing to stay and carry on nursing activities in the Territory, have been put on leave-without-pay status with agreements by the O.C.D. to pay their return passage to the mainland when they leave their nursing employment here. Miss MacLachlan, the chief nurse of the Office of Civilian Defense, was released to take up the position of Director of Nursing at The Queen's Hospital.

### *Vehicles*

The donated vehicles in use as ambulances have all been returned to the donors except for one or two which were to be turned over to a hospital when we no longer need them.

### *Maneuvers*

On August 10 and 12, and on February 2, 1945, practice maneuvers with simulated casualties were held. Two air raid alerts occurred during the year, one September 30 and one November 17, at which time the headquarters of the various organizations functioned admirably.

### *Blood Bank*

The building and equipment of the Honolulu Blood Bank were turned over on lend lease arrangement to the Peacetime Blood Plasma Bank on October 1, 1944.

### *Miscellaneous Activities*

Many diverse activities, necessitated by the Hawaii Defense Act and by Military edict, which were being carried out by the Office of Civilian Defense—such as the control of poisons—have been discontinued.

### **1945**

The activities of the Emergency Medical Services since the last report have been entirely a matter of closing up facilities of various sorts and disposing of the property according to the rules of the Surplus Property Division of the Federal Government.

The only matter undertaken by the Preparedness Committee which is of any lasting importance to the physicians of this Society is the agreement entered into, on the advice of the Preparedness Committee, with the American Red Cross. This plan was proposed by Dr. George Baehr, who was the Medical Head of the National Office of Civilian Defense, and was approved by the National Red Cross and the National Office of Civilian Defense. It briefly provides that some sort of a skeleton organization should be continued indefinitely to provide for emergency medical care for any type of disaster. Disasters not caused by enemy action, such as fires, floods, earthquakes, and so forth, are taken care of by the American Red Cross, with the cooperation of the Medical Society; the entire affair is managed by the American Red Cross, either by the local chapter concerned or by supervisors sent in from outside in the event of an extremely large disaster. Casualties caused by enemy action would be taken care of as they were in the last war, that is, by the medical profession with the assistance of the American Red Cross.

Three ambulances, loaded with the equipment necessary to set up what the Army would call a field dressing station, have been turned over to the American Red Cross, and it is their intention to keep this material in order and in usable condition, to be ready for any emergency.

Dr. Thomas Mossman has been appointed by the American Red Cross to be chairman of the committee



which would deal with any civilian disaster. He seems a particularly happy choice, since from the nature of his official position he would probably be the spearhead of such an organization, anyway.

This, then, is the final report of the Preparedness Committee, whose work surely has now been completed. As Chairman of the Committee and as Medical Director of the Office of Civilian Defense, I wish to again thank those innumerable physicians who gave unselfishly of their time, leisure, money and gasoline, to assist in carrying out the plans and projects of this Committee both before the war and after. The wisdom and the achievements of the Honolulu County Medical Society in their preparation for war, and in dealing with war when it came, are a chapter in their history of which they may well be extremely proud. Some may not have heard the remarks made by the Surgeon General of the Army, Major General Norman Kirk, when he addressed a large group of Army, Navy and civilian physicians in the auditorium of Kamehameha Schools during his visit here in 1943. He said that he wished to thank the medical profession of Honolulu for the magnificent job they did on December 7, "when they were ready for it and we were not."

### HAWAII COUNTY MEDICAL SOCIETY

The 248th regular meeting of the Hawaii County Medical Society was held on March 9, 1946. It was a dinner meeting given the members by the outgoing president, Dr. William F. Leslie.

Mr. Neal Ifversen, Assistant Manager of the Hawaii Medical Service Association, discussed present plans for starting the H.M.S.A. plan on Hawaii. Questions regarding the plan were answered, and sample forms distributed.

Reports of committees and officers followed. The request of the Library Committee for funds was approved.

The following new officers were elected:

<i>President</i> .....	DR. WALTER J. SEYMOUR
<i>Vice President</i> ....	DR. LEABERT FERNANDEZ
<i>Secretary</i> .....	DR. W. M. BOND
<i>Treasurer</i> .....	DR. T. OTO
<i>Delegates</i> .. .. .	{ DR. H. E. CRAWFORD
	{ DR. G. Y. TOMOGUCHI
<i>Alternate Delegates</i> ..	{ DR. ARCHIE ORENSTEIN
	{ DR. H. M. PATTERSON

The meeting was adjourned at 9:15 p.m.

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The 249th regular monthly meeting of the Hawaii County Medical Society was held at Hilo Memorial Hospital on April 5, 1946.

Dr. Jerry Price, of the New York Neurological Institute, addressed the Society on the subject, "Recent Advances in the Diagnosis and Treatment of Epilepsy."

It was announced that Dr. Chauncey Leake would visit Hawaii on the weekend of May 11-12 and address the Society, probably at a dinner meeting Saturday evening. Dr. Harry Yuen was elected to fill the one vacancy on the Board of Censors. Drs. Crawford, C. B. Brown, and Loo were reappointed to the Library Committee; Dr. William Leslie was nominated to the Legislative Committee for a three-year term; Drs. Patterson, Yoshina and Bond were appointed to the Scientific and Program Committee.

The matter of instruction of delegates to the forthcoming annual meeting of the Territorial Medical Association was rendered difficult by the fact that all records of the past year's meetings had been lost in the tidal wave. The delegates were charged therefore merely to pay close attention so they could later give a full report.

Dr. Seymour then expressed the Society's sympathy toward those who had suffered losses in the tidal wave. It was known that Dr. Crawford had lost his entire house and its contents, though he and his family escaped. Drs. Ireland and Bond, at Puumale Hospital, lost their houses. Dr. Ireland was caught by one of the waves, but escaped with only a bad ducking and exhaustion.

Dr. Archie Orenstein then reported as follows for the Disaster Council:

1) Water supply. At the suggestion of the Naval epidemiologist, the chlorine content of the water supply has been increased from its former inadequate level to 0.5 parts per million.

2) Many open sewer connections have been plugged, pumps have been repaired, and sewers have been opened; sewage is now flowing freely and constitutes no hazard.

3) The Naval epidemiologist says that immediate use of DDT is not only unnecessary but ineffective, and that it should be applied after flies begin to appear. This opinion aroused considerable argument.

4) Typhoid booster shots should be offered to everyone.

5) It was not felt necessary to ration penicillin, despite its relative shortage.

6) The question of quarantining the most heavily damaged area pending the removal of debris from it was discussed heatedly, and no conclusion reached.

W. M. BOND, M.D.,  
*Secretary*

### MAUI COUNTY MEDICAL SOCIETY

A special meeting of the Maui County Medical Society was called to order at the Wailuku Hotel on January 29, 1946.

Drs. Cowan and Anderson were welcomed back from military service and their Society dues for the remainder of the year were remitted.

The question of elevation of the Civil Service status of hospital ward maids was referred to the head nurse and doctor of each hospital affected.

The Society requested enlightenment from the office of veterans' affairs in Honolulu regarding the financing of medical care of veterans.

It was announced that it had been learned that Government Physicians would perform autopsies without charge.

Dr. Charles L. Wilbar, Jr., President of the Territorial Board of Health, discussed health in the Territory and compared it with that on the Mainland. He emphasized the importance of certain measures such as tuberculosis control and child hygiene. He stated that the thorough screening of the recently imported Filipino laborers, including a Kahn test and chest x-ray and stool examination, rendered further concern about them unnecessary except perhaps for further stool examinations. He recommended a booster dose of typhoid vaccine every two years.

The Society reaffirmed its stand in favor of free choice of physician on a fluctuating fee-schedule basis for Welfare cases.

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The regular monthly meeting of the Maui County Medical Society was called to order on February 8, 1946, by the President, Dr. von Asch.

Dr. Fennel, the guest of honor, visiting in his capacity as President of the Territorial Association, led a discussion of a large number of topics of current interest to the Society.

Maui County Medical Society held its annual meeting at Wailuku Hotel on March 22, 1946 with Dr. Balfour presiding. Captain Whitson attended as a guest. Dr. Fleming was welcomed back from the service.

The veterans problem has not been clarified. Each member was urged to petition the Office of Veterans Affairs, Iolani Palace, Honolulu, for individual certification to treat veterans.

H.M.S.A. is desirous of getting a Mauian for business manager. Salary \$375 per month with \$50.00 car allowance.

Committee reports were received. The library has been active and is well stocked with periodicals and texts. The Social Committee will plan a formal or beach party to be held before the Territorial Meeting.

Election of officers—Dr. Kushi moved and seconded by Dr. Dunn that this nominating committee's selection be accepted, which included:

President.....JOHN SANDERS  
Vice President.....E. H. ANDERSON  
Secretary-Treasurer.....W. D. BALFOUR

Dr. Anderson, recently returned from the service, gave a talk on New Therapeutic Measures and Uses and Appliances including Intocostin, Paraldehydes, Amigen, Tyrothricin, Streptomycin, Podophyllin, Pantopaque, Fibrin foam and film, and tantalum.

JOHN SANDERS, M.D.,  
*Secretary*

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The regular monthly meeting of the Maui County Medical Society was called to order on April 8, 1946, by the President, Dr. Sanders. Guests were Dr. Jerry Price, Dr. Ianne, Commander Hedblom, and Captain Whitson.

Dr. Rothrock was appointed delegate to the annual meeting of the Territorial Association in May, with Dr. Kushi as alternate. Dr. Sanders was appointed councillor in place of Dr. McArthur, who expected to be on the mainland at that time.

Approval was given the mass x-ray case-finding program outlined by the Territorial Board of Health. Drs. Tompkins, Sanders and Ianne were appointed to the list of doctors qualified to read chest x-rays.

The Army and Navy medical personnel on Maui were cordially invited to attend all meetings of the Society.

The beach party scheduled for April was postponed because of the conditions created by the recent tidal wave.

Dr. Jerry C. Price of the Neurological Institute in New York gave a talk on the diagnosis and treatment of epilepsy in the light of modern investigation and research.

W. D. BALFOUR, M.D.,  
*Secretary*

## HONOLULU COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Honolulu County Medical Society was called to order on March 1, 1946.

The membership approved the Board of Governors' recommendation that the 1946-47 dues be kept at \$60.00, with a fifty per cent optional reduction to members employed by institutions.

Dr. Wilbar discussed the matter of interference by the Board of Health with private medical practice, and assured the Society that any such interference was inadvertent and would always be stopped promptly when discovered.

A report on the present status of the venereal disease control program was presented by Dr. Samuel Allison. Dr. Berk read a report on the

1945 influenza epidemic. Dr. Meller read a paper on epilepsy. Dr. Buzaid discussed Incidence of Malignancy in the Territory.

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The Annual Meeting of the Honolulu County Medical Society was held on April 5, 1946, in the Mabel Smyth Auditorium.

A preliminary program on cancer was presented by Drs. Judd (gastric carcinoma), Strode (carcinoma of the colon), Milnor (carcinoma of the breast and uterus), and Buzaid (roentgenologic aspects of cancer).

The following resolution was read and adopted by unanimous vote:

#### RESOLUTION

*Whereas*, Dr. Peter L. Young was licensed to practice medicine in the Territory of Hawaii in July, 1937, only after four consecutive unsuccessful attempts to pass the examinations for medical licensure here; and

*Whereas*, Dr. Young was convicted in March, 1941, of failure to keep proper narcotic records, and this conviction was reversed by the United States Supreme Court and the case is still pending in the U. S. Attorney's office; and

*Whereas*, Dr. Young was convicted of criminal abortion on March 22, 1943, and is still out on bail pending further appeal from this conviction; and

*Whereas*, Dr. Young was convicted of criminal abortion and second degree murder on May 10, 1943, and is still out on bail pending further appeal from this conviction; and

*Whereas*, Dr. Young's license to practice medicine in Hawaii was revoked on the ground of gross negligence and manifest incapacity in July, 1943; and

*Whereas*, Dr. Young was indicted for criminal abortion on April 19, 1945; and

*Whereas*, another charge for criminal abortion is now pending against Dr. Young; and

*Whereas*, it appears from the foregoing that our present statutes are inadequate to protect the public from such practices;

*Now therefore be it resolved*, that the Honolulu County Medical Society respectfully petitions the next legislature of the Territory of Hawaii to provide by statute, that any person who is engaged in the business of performing illegal abortions, or has been convicted of such offense on one previous occasion, shall not be allowed bail pending appeal from any subsequent conviction of the crime of abortion.

#### THE HONOLULU COUNTY MEDICAL SOCIETY

NILS P. LARSEN, M.D., President

H. C. GOTSHALK, M.D., Secretary

The annual reports of the officers and committee chairmen were read, accepted and filed. Abstracts of these appear elsewhere in this section of the JOURNAL.

The annual election of officers followed, the following selections of the Nominating Committee being unanimously elected to office:

*President*.....H. E. BOWLES  
*Vice President*.....H. C. GOTSHALK  
*Corresponding Secretary*.....H. L. ARNOLD, JR.  
*Recording Secretary*.....S. L. YEE  
*Treasurer*.....J. W. DEVEREUX

*Board of Governors*.....{ A. S. HARTWELL  
 JOSEPH LAM  
 L. L. BUZAIID

*Board of Censors*.....N. P. LARSEN

*Delegates to Hawaii  
 Territorial Medical Ass'n*.....{ LEON MERMOD  
 M. E. STEVENS  
 R. D. KEPNER  
 R. B. CLOWARD  
 W. K. CHANG  
 T. J. FUJIWARA  
 C. M. BURGESS

*Alternate Delegates*.....{ HOMER IZUMI  
 ROBERT JOHNSTON  
 L. A. HONL  
 RICHARD CHUN  
 HOMER BENSON  
 GARTON WALL

*Committee on Forms of  
 Medical Practice*.....CLARENCE FRONK

*H.M.S.A. Board*.....{ F. J. PINKERTON  
 WILLIAM SHANAHAN  
 THOMAS MOSSMAN

Since this was a joint annual meeting of the Honolulu County Medical Society and the Honolulu County Medical Library, Dr. Gaspar also presented nominations for election to the Board of Governors of the Medical Library. The following doctors were unanimously elected:

*President*.....N. M. BENYAS  
*Vice President*.....PAUL WITHERINGTON  
*Vice President*.....F. J. HALFORD

*Library Board*.....{ R. B. CLOWARD  
 H. H. WALKER  
 W. K. CHANG  
 THOMAS MOSSMAN

H. C. GOTSHALK, M.D.,  
*Recording Secretary*

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A special meeting of the Honolulu County Medical Society was convened on April 12, 1946, to hear Dr. Jerry Price of the staff of the Neurological Institute in New York City discuss epilepsy. Dr. Price is head of the Baird Foundation for the study of epilepsy at the New York Neurological Institute. He was brought to Hawaii through Mr. Vance of the Department of Institutions.

S. L. YEE, M.D.,  
*Recording Secretary*



# NOTES AND NEWS

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## PERSONALS

The Medical Group has announced the addition of DR. ROBERT HUNTER, of Mt. Sterling, Kentucky, who specializes in obstetrics and gynecology, and of DR. KYRIL B. CONGER, of Ann Arbor, Michigan, specializing in urology.

DR. FRANK HATLELID has joined the staff of the Waialua Plantation hospital after his recent discharge from the Army Medical Corps.

DR. WILLIAM A. MYERS has been added to the staff of The Clinic in their pediatrics section. He was previously in the Navy at Pearl Harbor.

DR. LAURENCE M. WIG, formerly on Molokai and Maui, has opened his office in the Young Building, Honolulu, for the practice of general surgery.

DR. AND MRS. ALFRED S. HARTWELL have announced the birth of their fourth child, JULIE, born March 2, at Kapiolani Maternity Hospital.

DR. CHARLES L. WILBAR, JR., president of the Board of Health, proposed a resolution at the meeting in Washington, D.C., of the Association of State and Territorial Health Officers advocating statehood for Hawaii, which resolution was passed. DR. WILBAR will return to Honolulu early in May.

DR. ROBERT KATSUKI has reopened his office in Honolulu after being discharged from the Army Medical Corps.

DR. Y. UYEHARA has opened his office in Honolulu.

DRS. HOMER R. and ROBERT G. BENSON have reopened their offices in the Young Building, Honolulu, in addition to maintaining their office at Civilian Housing, Pearl Harbor.

DR. O. A. JEFFREYS has returned from California for a visit in Honolulu. He practiced for 25 years in the Islands prior to his retirement.

DR. ROBERT FAUS has been vacationing on the mainland.

The St. Francis Hospital has opened its new \$600,000 wing with formal ceremonies on February 17. There are now 165 adult beds in the hospital. The new addition provides four major and three minor operating rooms and a modern x-ray laboratory. The hospital is planning further expansion so as to have a total of \$1,500,000 invested in its plant in the near future. This will provide Honolulu with one of the most modern hospitals to be found anywhere.

DR. RICHARD WILKINSON, retired plantation physician, died January 17 in the Queen's Hospital at the age of 76. During a varied medical career he practiced at intervals in Hawaii from 1900 until his retirement in Wahiawa.

DR. AND MRS. GILBERT M. HALPERN, of Honolulu, were presented with a daughter, DIANE ELIZABETH, on December 30.

DR. RODNEY T. WEST, formerly Commander, USNR, is temporarily associated with The Clinic.

DR. R. J. MCARTHUR, of Wailuku, Maui, is taking an extended vacation in Oregon. He left Honolulu by Clipper on April 16. In the same plane were DR. ARTHUR DURYEA, MRS. DURYEA and ARTHUR, JR., also flying to the mainland for vacation.

DR. Y. P. CHANG, previously located on Kauai, has joined the staff of the Chang Clinic in Honolulu.

DR. WILLIAM H. WILKINSON, of Lanai City, has had a recent visit from his parents, MR. AND MRS. OWEN WILKINSON, and his brother, OWEN, JR. They have now returned to Los Angeles.

SISTER ELIZABETH KENNY, famed Australian nurse, delivered an impromptu address and demonstration on March 24 at Mabel Smyth Building before a group of physicians, nurses, physiotherapists and others, on her methods of treating poliomyelitis. She brought out some new material on the role of the skin and fascia in this disease. Her presentation was well received by the local profession. DR. S. STEWART acted as chairman of the meeting.

A new wing to Kapiolani Maternity Hospital, Honolulu, was opened in March, providing about \$600,000 in improvements and additions. This provides the hospital with nearly 100 beds, with complete separation of the obstetrical from the gynecological cases by means of the new space.

Leahi Hospital has added to its temporary staff DR. FLORENCE BUEL, formerly of Maui, and DR. H. C. CHANG, recently discharged from Army Medical Corps.

A number of changes have occurred in the interne and resident staffs at The Queen's Hospital with DR. EDWARD HORNICK and DR. JOHN CHALMERS reporting to Ft. Douglas, Utah, for duty in the Army; DR. JAMES MARNIE is temporarily at Puunene Hospital, Maui, awaiting his orders to the Army, as is DR. DONALD ROBINSON while at Olaa, Hawaii. DR. JAMES HEARN and

DR. ROBERT CRAIG have terminated their internships and are awaiting orders to the Army. DR. VERNON CARVER has been commissioned a Lieutenant (j.g.) and assigned to Aiea Naval Hospital. The new internes at Queen's and their respective medical schools are: DRs. DEAN L. BUNDERSON, U. of Chicago; GEORGE M. EWING and JACK M. MARTT, Washington U. of St. Louis; JOHN L. PERRY, Louisville Medical School; SCOTT C. BRAINARD, Medical College of Virginia, and OSCAR THORP, University of Virginia.

### NOTES ON LEGISLATION

According to the Washington Letter, United States Public Health League, the Wagner-Murray-Dingell Bills are resting quietly in their respective committees. This legislation is too hot politically to drag out at this time. Over two hundred bills have been introduced during the 79th Session of Congress that deal with health or medical care problems. Only one important bill has become law, "Veterans Administration Bureau of Medicine."

The Letter further reports that Governor Dewey's Commission on Medical Care has turned down compulsory health insurance for New York State, saying it was not prepared to recommend any plan financed on a compulsory basis.

### BOOK REVIEW

*Men Without Guns.* By DeWitt Mackenzie, War Analyst of the Associated Press. 152 pages. 177 drawings, with 118 plates in full color. Price \$5. The Blakiston Company, 1945.

This book brings into one volume the reproductions of the Abbott Collection of Paintings, which have been so familiar to physicians during the war. That they are a documentary history of the role of the Army Medical Corps in all theatres of action is attested to by the fact that they are now the property of the United States Government. The paintings are the work of twelve artists who have told the worthy story of Army Medicine in World War II, from first-hand experiences under fire, in an authentic and memorable manner.

The text, written by an authoritative war analyst, carries the reader through broad sweeps of Army Medical Corps activities, interspersed by numerous detailed accounts of individuals, nameless in the account but heroic to the degree that their deeds will never be forgotten, whether they be corpsman, nurse or physician. The reviewer recommends this book to physician and layman alike as a permanent record on Army Medicine in World War II.

### RESUME OF HEALTH DEPARTMENT NEWS

DR. WILLIAM R. MURLIN of the United States Public Health Service is the new survey physician of the tuberculosis bureau of the Board of Health. DR. MURLIN is a graduate of the University of Rochester School of Medicine and Dentistry in Rochester, New York. He served as acting director of the tuberculosis control division of the Oregon State Health Department for three years and was in complete charge of a case-finding x-ray unit for a year.

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MISS SARA LEE EDWARDS, MRS. GENEVIEVE SCHEY, and MRS. NANCY Y. CHING were recently appointed to the public health nursing bureau of the Board of Health.

MISS EDWARDS received her nurse's training at Yonkers General Hospital in New York and her public health nursing certificate from the University of California at Los Angeles. She has been assigned to Lanakila health center.

With the territorial health department since February 1944, MRS. SCHEY left for the mainland on April 30 and returned last month to be a public health nurse at Wahiawa.

MRS. CHING also returned to the Board of Health after resigning in 1943 and working for two years as a public health nurse in Cheyenne, Wyoming. She is assigned to Kapahulu health center.

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Newly appointed assistant director of the bureau of maternal and child health and crippled children of the Board of Health is DR. BARBARA ANN HEWELL of Washington, D.C.

DR. HEWELL is a pediatrician and was assistant director of the division of research in child development in the U. S. Children's Bureau of the Department of Labor in Washington, D.C., for three years before coming here.

She received her medical training at Vanderbilt Medical School in Nashville, Tennessee, and her pediatric training at Duke University Hospital, the Children's Hospital and the Cincinnati General Hospital.

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A newly appointed health nurse on Kauai is MISS JUNE TRIPLETT, public health nurse from Minnesota. She received a B.S. degree from the University of Minnesota and her nurse's training at Minneapolis General Hospital.



MRS. LILLIAN N. HICKS, supervising public health nurse at Kapahulu, left for the mainland by Clipper on March 7. She will live in Maine where her husband intends to open a hunting and fishing lodge.

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Completing twenty-two years of public health nursing in the Territory, MISS RACHEL BLYTH, public health nurse at Kapahulu health center, retired from service at the end of this month. She was with Palama Settlement for twenty years before joining the Board of Health staff.

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Public health nurses appointed to the Board of Health in February are MISS ELISABETH H. BOEKER, MISS MARY MANSFIELD and MISS WILDA FULTON.

MISS BOEKER and MISS MANSFIELD were with the King County health department in Seattle before coming here. MISS BOEKER received her B.S. degree and public health nursing certificate from the University of Washington in Seattle and MISS MANSFIELD was granted an R.N. degree from the Providence school of nursing in Seattle. She received her public health nursing certificate at the University of Washington.

MISS FULTON was with the city of San Francisco health department before coming here. She received her nurse's training at the Army school of nursing in Washington, D.C. She is now on Lanai.

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MISS CATHERINE BONETTE resigned from the Board of Health nursing staff in February to return to the mainland to continue her studies in public health nursing.

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Resigning from the territorial health department to return to missionary work in Korea, MISS ELMA ROSENBERGER, public health nurse at Kapahulu health center, left for the mainland last month to spend a few months there before leaving for the Orient.

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MRS. KATHERINE F. GENEST, public health nurse, was appointed to a public health nursing position at Lanakila health center in February. She had previously been a member of the health department in 1943.

\*\*\*

PAULA L. SORG arrived from the mainland in March to become orthopedic nursing consultant with the bureau of crippled children of the Board of Health. MISS SORG obtained her nurse's train-

ing at the Cook County School of Nursing in Chicago and her B.S. degree at the University of Chicago.

She has a physical therapist certificate from Harvard Medical School granted after a training period in the school.

Before coming here, MISS SORG was serving an internship period in supervision and orthopedics with the Detroit Visiting Nursing Association. She will work with MISS ESTELLE KEZER, orthopedic nursing consultant with the health department.

\*\*\*

DR. CLAIR V. LANGDON, director of health and physical education at Oregon State University, will direct a summer workshop in school health at the University of Hawaii this summer, it has been announced by Dr. Hubert Brown, chairman of the health department of the University of Hawaii.

Physicians, nurses, and teachers will have an opportunity to participate in the workshop. At present it is planned to hold the class in two sections, one meeting on Monday, Wednesday, and Friday, the other on Tuesday and Thursday, both to be in session for six weeks. Adjustments in this schedule may be made at the time of registration (June 17) to accommodate those persons wishing to enroll, Dr. Brown stated.

### CALLING ATTENTION TO

Items of possible interest to friends of  
Chauncey D. Leake

May, 1946

1. AMERICAN CHEMICAL SOCIETY meeting in Atlantic City April 8-12 offered medicinal chemistry program rivaling that of Federation of American Societies for Experimental Biology held month previously: symposia included nutritive value of protein hydrolyzates, microbiology, anti-malarials, clinical biochemistry, enzymes, metabolism of acetic acid, vitamins, premedical education, pharmacological agents, and biochemical and biophysical studies on viruses. But commercially inspired official hush on penicillin continues.

2. THERAPEUTIC NOTES: WW Zuelzer & FN Ogden find 5 mgm folic acid daily by mouth specific for megaloblastic macrocytic anemia (*Proc Soc Exp Biol Med* 61: 176, '46). D State & OH Wangenstein recommend procaine intravenously, 1 Gm in 500 cc physiological saline solution, in treatment of delayed serum sickness (*JAMA* 130: 990, Apr 13/46). EA Brown & Co recommend 2% carbamide peroxide in 50% glycerol & water as safe & effective topical antiseptic (*New Eng J Med* 234: 468, Apr 4/46). BL Coley & Co review bacterial toxin therapy of malignancy (*Cancer Res* 6: 205, '46).

3. OF CULTURAL INTEREST: McGraw-Hill, 330 W 42nd NY18, announces *Science Illustrated*, large sized jazz science monthly at \$3 annually. Froben Press, 4 St Luke's Place, NY 14, offers W Marmelszadt's *Musical Sons of Aesculapius*, illustrated at \$3. JB Lippincott,



Phila 5, issues D Guthrie's *History of Medicine*, 448 pp, illus at \$6. AA Knopf publishes A Castiglioni's *Adventures of the Mind*, 448 pp, illus at \$4.5. MacMillan, 60 5th Ave, NY, issues AS Eve's *Rutherford*, a significant biography, 451 pp at \$5. A. Kardiner's *Psychological Frontiers of Society* appears from Columbia Univ Press, NY, with 475 pp at \$5.

4. ENZYMES AND GROWTH: D Grob well discusses control of activity of proteolytic enzymes (*J Gen Physiol* 29: 219, 249, '46). W Shive & Co study competitive analogue-metabolite growth inhibitions, & suggest product inhibition index as molar ratio of analogue to metabolite at which rate of synthesis of product is reduced enough to prevent growth of organism in medium free of product (*J Biol Chem* 162: 451, 463, '46). F Schlenk & Co note inactivation of glutamic-aspartic transaminase by sunlight & ultraviolet, not X-ray (*Proc Soc Exp Biol Med* 61: 183, '46). Our CE Lankford & PK Skaggs report cocarboxylase as a growth factor for gonococci (*Arch Biochem* 9: 265, '46). PR Cannon & Co demonstrate importance of protein reserves for antibody production (*J Immunol* 52: 267, '46).

5. SYMPOSIA & REVIEWS: WB Dublin neatly reviews knowledge of reticulum (*Arch Path* 41: 299, '46). LJA Parr & E Shipton offer full review of rheumatic spondylitis (*Med J Austral* 1: 277 Mch 2/46). Note excellent symposium on radiobiology (*Brit Med Bull* 4: 1-65,

'46). EM Hildebrand introduces general symposium on weed destruction, important in pollen and allergy control (*Science* 103: 465, 469, 472 etc, Apr 19, '46).

6. OTHERWISE: HH Anderson & Co report physical & biological properties of subtilin (*Science* 103: 419, Apr 5/46). TF Gallagher & Co, EC Kendall & Co, ES Wallis & Co go to work on synthetic steroids (*J Biol Chem* 162: 491, 555, 633, '46). BE Abreu & Co offer neat biochemorphic study of thiophene analogues of transientin (*J Pharmacol* 86: 208, '46). RH Goetz (Cape Town) describes rate & control of blood flow thru skin of lower legs (*Amer Heart J* 31: 146, '46). HS Simms shows log increase in mortality as manifestation of aging (*J Gerontol* 1: 13, '46). J Furth finds thymectomy reduces incidence of leukemia in high leukemia strain mice, probably by removing potentially malignant cells (*Ibid* p 46). JE Ayre & WAG Bauld report low thiamine with high estrogen is dangerous precancerous combination (*Science* 103: 441, Apr 12, '46). ER Loew & Co give pharmacological data on benadryl (*J Pharmacol* 86: 229, '46). CN Frazier & EH Frieden discuss action of penicillin (*JAMA* 130: 677, Mch 16/46). HK Faber & RJ Silverberg find pharynx favorable site for primary penetration of polio virus & primary lesion in peripheral ganglia (*J Exp Med* 83: 329, '46). EC Dodds discusses ancient apothecaries & modern biochemists (*Lancet* 1: 221, Feb 16/46).

# THE HONOLULU COUNTY MEDICAL LIBRARY

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MRS. ETHEL HILL, *Librarian*

MRS. GLADYS OHMS, *Library Assistant*

8:00 a.m. - 4:30 p.m. (except Sunday)

7:30 p.m. - 9:30 p.m. (except Saturday)

Phone 65370

Library closed all day on national holidays;  
after 12 o'clock on Territorial holidays

## RECENT ACQUISITIONS

### By Purchase:

Archer, V. W. *The osseous system*. c1945.

Ash, J. E. *Pathology of tropical diseases*. c1945.

Bockus, H. L. *Gastroenterology*. v.3. and Index.  
c1946.

McQuarrie, Irvine, ed. *Brennemann's practice of  
pediatrics*. 4v. c1945.

*Quarterly cumulative index medicus*, v.37. c1945.

### From the NURSES' ASSOCIATION:

Dwyer, S. M. *Modern urology for nurses*. c1945.

Jensen-Nelson, K. L. *Massage in nursing care*. 2nd  
ed. c1941.

### From DR. HARRY ARNOLD, JR.

*Public Health Economics* (subscription).

### From DR. L. W. BROWN

Sigerist, H. E. *Socialized medicine in the Soviet  
Union*. c1937.

### From DR. WILLIAM O. FRENCH, JR.

*American Journal of Tropical Medicine* (back files).

*Transactions of the Royal Society of Tropical Medi-  
cine and Hygiene* (back files).

Hackett, C. J. *Boomerang leg and jaws in Australian  
aborigines*. 1936.

### From DR. MARIE FAUS

*Who's important in medicine*. c1945.

### From THE TUBERCULOSIS ASSOCIATION

Hilleboe, H. E. *Mass radiography of the chest*. c1945.

### From the U. S. PUBLIC HEALTH SERVICE

*Manual for coding causes of illness*. 1944.

*Boletin de la Oficina Sanitaria Pan Americana* (cur-  
rent issues).

*Leprosy in India* (current issues).

*Leprosy Review* (current issues).

*Leprosy: Summary of Recent Work* (current issues).

*Selected writings . . . Ochsner Clinic* (current issues).

### From the OFFICE OF THE AIR SURGEON,

ARMY AIR FORCE

*Air Surgeon's Bulletin* (back and current files).

### From the OFFICE OF THE SURGEON GENERAL,

MIDDLE PACIFIC

*War Department Technical Bulletins* (back and cur-  
rent files).

### From the AMERICAN MEDICAL ASSOCIATION

*New and non-official remedies*, 1945.

*Annual reprint of the reports of the Council on phar-  
macy and chemistry for 1944*.

### From the Publisher:

Fishbein, Morris, ed. *Common ailments of man*.  
c1945.

### From The Clinic: (all back files)

*Abstracts of Bacteriology*

*American Journal of Diseases of Children*

*American Journal of the Medical Sciences*

*American Journal of Ophthalmology*

*American Review of Tuberculosis*

*Annals of Internal Medicine*

*Annals of Allergy*

*Annals of Surgery*

*Archives of Ophthalmology*

*Archives of Neurology and Psychiatry*

*Archives of Surgery*

*Bacteriological Reviews*

*Bulletin of the American College of Surgeons*

*Bulletin of the Johns Hopkins Hospital*

*Bulletin of Practical Ophthalmology*

*Bulletin of the History of Medicine*

*California and Western Medicine*

*Canadian Medical Association Journal*

*Journal of Bacteriology*

*Journal of the National Cancer Institute*

*Journal of Pediatrics*

*Journal of Urology*

*Proceedings of the Society for Experimental Biology  
and Medicine*

*Proceedings of the Staff Meetings of the Mayo Clinic*  
*Public Health Reports*

★ ★ ★

The Medical Library should have reprints of all papers written by doctors in the Territory, or at least a complete bibliography of each doctor's writings. We would greatly appreciate receiving any reprints that anyone may have to help build up this important permanent collection. The reprints we now have are being arranged and catalogued alphabetically under each doctor's last name in separate folders. If anyone wishes to know what publications of his own the Library has on file, he will be able to obtain a list by calling the Librarian.

With the wish to further acquaint doctors and nurses with some of the services offered by the Library, we suggest that anyone interested in keeping in touch with recent material being published in a particular field so inform Mrs. Hill. New medical journals arrive every day, and the contents of each are scanned by the Librarian before they are placed on the shelves. Mrs. Hill will be glad to call any doctor regarding recent material on any subject that may appear in any of the 180 journals being currently received.

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*Infants and Children* WITH PAPAYA FRUIT

DRIED FRESH TO PRESERVE NATURAL ENZYMES AND PECTINS

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# INTER-ISLAND NURSES' BULLETIN

*Official Publication of the Nurses' Association, Territory of Hawaii*

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ETHEL H. BROWN, R.N., *Executive Secretary*

*Bulletin Committee*

VIRGINIA M. DOYLE, R.N.  
EVA E. PEYTON, R.N.  
ERMA BURGESS, R.N.  
HELEN GAGE, R.N.

*Island Reporters*

HAWAII: THELMA M. PATTEN, R.N.  
MAUI: BETSY BOYLIN, R.N.  
KAUAI: THELMA HENSLEY, R.N.

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## Proceedings of the Fifteenth Annual Convention, Nurses' Association

### BUSINESS MEETING

March 21, 1946

#### President's Address

Fellow Nurses:

Another milestone has passed and the Territorial Nurses' Association is in annual session for the fifteenth year. It would be interesting to be able to forecast the next fifteen years on the basis of progress made in the past.

We are in a period of transition and the theme chosen for this convention is one which expresses best the direction in which we are traveling, "Any lasting reforms in Nursing must be made by Nurses."

We must take an inventory of the war years in order to project the future. However, we will not want to include in our nursing plans some of the evils evolved from the short cuts and improvised methods which we were forced to employ during the past four years. Nursing service must be stabilized. Geographically we are in a strategic spot for transients. However, many of the so-called transients are now members of long standing in this community. You can count some of them at this meeting. Local graduates of schools of nursing have taken an active part in the activities of the Nurses' Association. Through their efforts we hope to see a University School of Nursing here in Hawaii.

Linked closely with the nursing activity we look to the Nursing Service Bureau. In your president's report last year a plea was given for a Director of the Bureau in combination with an Executive Secretary for the Nurses' Association. That has been accomplished, but we now discover that the two part-time positions should have been full time. This will be brought out in all of the committee

reports which you will hear this morning. We have many problems which have been magnified by the general trend of the times. Wartime experiences have had a marked influence on the profession of nursing. Some of the resulting confusion still prevails.

We anticipate the use of the Nursing Service Bureau as a center where all nurses can have free counselling and placement. This work has already begun in mainland professional registries. Public relations is an extremely important factor in good nursing service. This is another function of the Bureau—that of establishing good-will in the community. We can all take an active part in this phase of the work.

Your Board of Trustees averaged one meeting a month during this past year. Each County Association has received a detailed account of the business. Your president could not fulfill her pleasant obligation of visiting each County Association during her term of office. This duty is therefore happily passed on to the newly elected president. Now that peace has come, transportation should be more readily available.

The volunteers who have assisted the nursing program during the war years have earned the admiration and gratitude of the entire community and also the thanks and appreciation of the nursing profession. It has been a real privilege to be associated with these conscientious workers. To the delegates at this convention we extend our Aloha, and hope you may leave with a revived feeling of interest in our Association. To all officers, members of the Board of Trustees and committee workers of the Nurses' Association, Territory of Hawaii, I express my sincerest thanks for your loyalty and faithfulness.

HAZEL B. MATTSON

## Report of the Secretary

Madam President:

Membership in the Nurses' Association, Territory of Hawaii, as of December 31, 1945, was as follows:

	PAID MEMBERSHIPS	HONORARY MEMBERSHIPS
City and County of Honolulu .....	204	13
County of Hawaii .....	42	5
County of Maui .....	51	0
County of Kauai .....	46	0

This is a net loss of 275 paid memberships when compared with 1944's membership roll.

An opinion from the Attorney General's office states that the designation "honorary" should not be applied to members of our Association who are actually nurses. It is suggested that we call such members "life" members.

The Board of Trustees, on May 12, 1945, appointed Mrs. Ethel Hensley Brown as Executive Secretary of the Association and Director of the Nursing Service Bureau, at a monthly salary of \$300.00.

I feel the By-Laws of our Association are in some instances ambiguous and inadequate, in other instances too detailed and elaborate. Having had to work with all Articles of our By-Laws during the past year, I advocate that this convention consider the appointment of a special constitutional or By-Laws revision committee.

PHYLLIS HUBBARD, *Secretary*

### RESOLUTION

*Be it resolved*, First, that the President of the Nurses' Association, Territory of Hawaii, appoint within two weeks after the adjournment of this convention, from the membership roll of the District Association of the City and County of Honolulu, a constitutional committee of five members, and

*Be it resolved*, Second, that the said committee shall meet in continuous session to study and rewrite, with legal assistance, the By-Laws of the Nurses' Association, Territory of Hawaii, and

*Be it resolved*, Third, that upon the completion of the final draft, the new By-Laws be mimeographed and a copy sent to each active member of the Nurses' Association, Territory of Hawaii, and

*Be it resolved*, Fourth, that within sixty days after the date of mailing each County Association take a vote of all active members and if a majority of members vote to accept the By-Laws as presented, that said By-Laws shall be acceptable to the whole County Association, and

*Be it resolved*, Fifth, that if three-fourths of the County Associations, by majority vote, vote to accept the By-Laws, that from the date of acceptance, such By-Laws shall become the official laws of the Nurses' Association, Territory of Hawaii.

## Report of the Treasurer

For the Year Ended December 31, 1945

### Income:

Membership Dues for 1945	
City and County of Honolulu.....	\$1,296.75
County of Hawaii .....	213.50
County of Maui .....	153.00
County of Kauai .....	67.50
	<u>\$1,730.75</u>
Garden Party and Miscellaneous ....	3,263.21
Total Income .....	<u>\$4,993.96</u>
Less: Amount applicable to American Nurses' Association .....	\$ 402.75
Amount applicable to Nursing Service Bureau .....	520.75
	<u>923.50</u>
	<u>\$4,070.46</u>

### Expenses:

Auditing .....	\$ 150.00
Advertising and Printing .....	74.38
Flowers .....	48.00
Postage .....	16.75
Rent .....	360.00
Secretarial .....	2.00
Telephone .....	41.44
Luncheon .....	106.96
Taxes on Admissions .....	385.11
Stationery .....	57.70
	<u>\$1,242.34</u>
	<u>\$2,828.12</u>
Transferred to Nursing Service Bureau for General Expenses .....	2,800.19
Net Increase to General Fund.....	<u>\$ 27.93</u>

I recommend that our Executive Secretary be made also the Executive Treasurer, thus having continuity in the keeping of the books and records, and giving better service to the members of this Association as well as to those who audit our books.

ESTHER KEKELA, *Treasurer*

### RESOLUTION

*Be it resolved*, that the position of Executive Secretary of the Nurses' Association, Territory of Hawaii, be made a full time position and that the Executive Secretary assume the collecting and paying of monies, and the keeping of financial records now the responsibility of the elected Treasurer.

## Report of the Finance Committee

This committee met twice during the year of office. In December, 1945, the question was raised as to whether Territorial Association funds amounting to approximately \$500 should be used for the purpose of Hawaii Medical Association Journal subscriptions. This committee voted against using general funds for this purpose.

A second meeting was held February 21 to prepare the budget for the coming year. The following has been drawn up, based on expenses of recent years plus additional amounts to allow for expanding activities:

Executive Secretary's salary (Association's share)....	\$1,800.00
Auditor's fees .....	600.00
Rent .....	360.00
Stationery, etc. ....	150.00
Stamps .....	50.00
Telephone (1/2) .....	75.00
Annual Meeting's special expenses .....	75.00
Flowers, gifts, etc. ....	25.00
Miscellaneous .....	35.00
TOTAL .....	<u>\$3,170.00</u>

ESTHER KEKELA, *Acting Chairman*

## Report of the Legislative Committee

The Legislative Committee had only one meeting, since the passage of the Nurse Practice Act by the 1945 Legislature accomplished the aims which had been the goal of past committees.

Your committee in closing its business for this year presents three objectives to be obtained for the coming year.

First: That the Association be kept informed by the Board of Registration of Nursing of progress of the enforcement of the new Nurse Practice Act.

Second: That one member of the Legislative Committee be a person who can attend Legislative Sessions that pertain to nursing and hospitals, to keep the Association informed and up to date on all news and legislation concerning hospitals and nursing.

Third: That the Legislative Committee report monthly to County Associations, all the information of this nature. Arrangements should be made to have all publications concerning legislation sent to the Mabel Smyth Building, and placed in the work file for the Legislative Committee, so they may keep pace with all the information affecting hospitals and nursing.

ALBERTINE SINCLAIR, *Chairman*

## Report of the Information and Publicity Committee

Programs for the annual convention were ordered from the printers and submitted to newspapers for publication. Other publicity has been presented to the press from time to time. Our greatest difficulty has been to get material printed as presented. Misinterpretation of news regarding the nursing profession too often leads to community misunderstanding. Any suggestions for better presentation of news will be gratefully accepted.

It is my impression that the functions of this committee should be absorbed by the Executive Secretary, if her position becomes a full time appointment, because:

1. Volunteer committees, which change frequently, do not have time to keep informed of activities in the entire field of nursing.

2. An employed Executive Secretary would have the opportunity to carry on a continuous public relations program.

3. The Executive Secretary orders stationery and office supplies, and already has established business contacts with printers for the Association. She can more easily order all printing including programs.

4. The Secretary receives news bulletins from National and State organizations and is in a position to keep all County Association supplied with such information.

ETHEL HENSLEY BROWN, *Chairman*

## Report of the Educational Committee

Individual members of this committee have attended meetings where problems concerning the shortage of nurses in Hawaii have been discussed.

On two occasions arrangements were made for a nurse to speak to high school girls about the nursing profession, its needs, and possibilities of advancement in the profession.

This committee has attended conferences and received information from the War Records Depository at the University of Hawaii.

The information from the survey sponsored by the Hospital Council concerning vital problems in nursing in Hawaii was tabulated; and suggestions were sent to each of the County Associations, and to the program committee for the Annual Convention.

This committee has assisted the Board of Registration in making plans for the accreditation of nursing schools, and approves the standards being set up, using the minimum requirements of the National League of Nursing Education.

ARLENE THOMPSON, *Chairman*

## Report of the Bulletin Committee

In October of 1945, Mrs. Helen Gage had the happy thought of asking the Territorial Medical Association if the nurses might purchase space in the HAWAII MEDICAL JOURNAL. When Dr. Harry L. Arnold, Jr., the editor, was approached, he and his committee agreed to give space for our *Nurses' Bulletin*.

They very generously offered us a special rate of \$1.00 per subscription for this year to enable us to circulate the journal to our entire membership; the rate to their own members being \$2.00 per year. They also allowed us 15 per cent commission on all advertising we secured.

On November 8, 1945, at a joint meeting of the Board of Trustees and all committees, it was voted that we contract for 500 subscriptions, our estimated membership. The cost of these was to be deferred as far as possible by our commissions from advertising and the balance to be covered by special funds to be raised by the Association. To date, I am sorry to say, we have secured only one and one quarter pages of advertising, leaving as you can see a marked deficit.

The American Nurses' Association has taken two subscriptions. Copies have also been sent to all the State Nurses' Associations. It has been requested that they reciprocate by sending us copies of their publications for our library.

Since the publication of the first issue of the combined JOURNAL and BULLETIN, it has been interesting and encouraging to note the favorable comments by many people outside the two organizations as well as those of our members and the doctors.

The Bulletin Committee wished to thank Mrs. Brown for her efforts in getting out the first two issues.

ALICE A. SCOTT, *Chairman*

## Report of the Margaret Jones Fund Committee

At the end of 1942 the account was in credit about \$5,800.00, part of which represented repayment on the loan to Mabel Smyth Memorial Fund. Then, in January 1943, final payments of principal and interest were received from the Mabel Smyth fund in the total amount of about \$2,200.00, making a total credit about \$8,000.00 in the Margaret Jones Fund at the end of January 1943.

From then until July 1943 income exceeded loans so that the credit balance rose to \$9,200.00. In August 1943, \$5,000.00 par value Series G Savings Bonds were



purchased, reducing the credit to about \$4,200.00 and this again advanced to the total of \$4,900.00 in October 1944. In that month \$2,000.00 par value of Armour bonds were called for redemption and by November 1, the credit was \$7,000.00.

On April 18, 1945 there was an outright gift of \$500.00 to the Library Fund and in August 1945, a loan of \$1,000.00 was made to the Territorial Nurses' Association, leaving the credit around \$3,100.00. Since that time disbursements and receipts have been about in even balance and the credit on March 1, 1946 was \$3,022.69.

It is calculated that the annual income from fixed investments including the 17 shares of Territorial Building and Loan is approximately \$1,100.00 based on dividends and interest paid in 1945 or anticipated this year.

During the past year of 1945 and up to March of 1946, two loans were made; one of \$200.00 to a nurse for educational purposes, and a \$4,000.00 loan to the Nursing Service Bureau. This loan was made at the request of the Directors of the Nursing Service Bureau and against Mr. Kellerman's advice and is due to be paid in August 1946.

A down payment of \$500.00 to the Honolulu County Medical Library Fund was made on March 20, 1946.

LAURA HOOKER, *Chairman*

#### RESOLUTION

*Be it resolved*, that a committee be appointed to review and make recommendations regarding the Margaret Jones Memorial Fund, with the object in view of more clearly outlining the use of its income, and also the increase of its principal.

### Report of the Nursing Service Bureau Committee

The Nursing Service Bureau Committee has met regularly on the second Tuesday of each month. Two meetings were held with our Advisory Committee and a special meeting with the Board of Trustees, at which the feeling of this large group was that the consumers of nursing service should share in the support of the Bureau.

The major problem has been the financial condition of the Bureau. The annual financial report shows an income of \$15,575.72, and expenditures of \$14,722.66. Of the total income \$7,500.00 was from contributions from outside sources. Without this assistance there would have been a deficit of \$6,464.88.

A Director was employed June 1, 1945, on a half-time basis. The activities of the succeeding months have proved that the Director should be full time.

Two new permanent staff members were appointed: Effie Dewar, staff nurse from 3 to 11 p.m., and Edith Von Driska, staff nurse from 11 p.m. to 7 a.m. Claire Allen is serving as relief staff nurse.

Efforts were made to obtain financial aid from community and Territorial sources, the Chamber of Commerce Public Health Committee, the Community Chest, the Office of the Governor and the Medical Society. Five hundred dollars was contributed by the Chamber of Commerce, and \$100.00 per month, to a total of \$1,000.00, by the Honolulu County Medical Society.

The Board of Trustees were requested to appoint a special finance committee to continue efforts to obtain financial support.

The Nursing Service Bureau Committee submitted a request to the Board of Trustees to decide whether or not the Bureau was to close if financial security could not be assured. The decision was deferred pending the Annual Convention and the results of the efforts of the special finance committee.

The Nursing Service Bureau Committee recommends that the Association recognize the need of a full time Director, and adequate secretarial and clerical help if the Bureau is to continue.

ESTHER STUBBLEFIELD, *Chairman*

#### RESOLUTION

*Be it resolved*, First, that the Public Health Committee of the Chamber of Commerce be requested to subsidize the Bureau for a maximum of three years to the amount of 50 per cent of its annual budget while conditions return to normal and other means of permanent support for the Bureau are worked out.

*Be it resolved*, Second, that the formation of lay subscription to the Bureau be authorized as a means of bringing in additional income and providing a group to interpret the aims and needs of nursing, as well as to inform us of what the public wants in the way of nursing service.

### Report of the Library Committee

The aims and activities of the Library Committee were delineated at the last Annual Convention. They are:

1. Obsolete books in the library are to be removed, and the library is to be enlarged by the purchase of new books and periodicals.
2. Back files of periodicals and annual reports are to be completed and bound.
3. A bulletin board is to be purchased.
4. Some contribution is to be made to the Honolulu County Medical Library to assist in maintaining the staff.
5. A book-plate is to be designed and printed in order to identify books belonging to the Association.

These aims have been realized with the exception of the binding of periodicals and reports. A search is still being conducted for back copies of the *American Journal of Nursing*.

At the last annual convention the Library Committee recommended that the sum of \$5,000.00 from the Margaret Jones Memorial Fund be contributed to the Honolulu County Medical Library Endowment Fund. This recommendation was unanimously accepted by the House of Delegates, with the proviso that the specific use of this money be investigated by the Library Committee and the Board of Trustees. Meanwhile, however, the Nursing Service Bureau, finding itself in severe financing difficulties, has borrowed \$4,000.00 from the Margaret Jones Memorial Fund. Under these circumstances it will be impossible to contribute the contemplated \$5,000.00 without seriously jeopardizing the fund. It was, therefore, proposed that the payment of the proposed contribution be extended over a period of five

years, a thousand dollars per year. With this in view a token pledge of \$500.00 has already been made and another \$500.00 will be paid later in the year.

It is appropriate here to review the distinct advantages of cooperating with the doctors in their plan for endowing and enlarging the library.

1. The nurses enjoy the services of a trained librarian, who not only performs routine services, but also files annual reports, collects data and fills requests from the entire Territory.

2. If the nurses were deprived of the privilege of sharing the library, it would be impossible for them to have one, since rent and salaries alone would be more than they as an individual body could afford.

3. In conclusion it may be said that it would be advantageous if some representation were extended to the nurses by the Library Board, thus giving them a voice in the plans for the use of funds and establishing a link between the two groups.

#### FINANCIAL REPORT

Cash on hand January, 1944.....	\$ 85.48
From Margaret Jones Memorial Fund .....	500.00
	<hr/>
Disbursements, 1944	\$585.48
Library upkeep .....	\$100.00
Books .....	148.29
Periodicals .....	70.00
1945	
Bulletin board .....	6.25
Subscriptions .....	8.00
1946	
Books and periodicals .....	13.75
Design and printing of book plates .....	70.00
	<hr/>
TOTAL.....	\$426.29
Cash on hand.....	\$169.19

DOROTHY BLANK, *Chairman*

#### RESOLUTION

*Whereas*, we believe that it would be of assistance to both prospective student nurses and nurses desiring post-graduate study to have a central source of information regarding nursing schools and available postgraduate courses and,

*Whereas*, no such source is available; therefore,

*Be it resolved*, that the Library Committee of the Nurses' Association, Territory of Hawaii, be requested to make arrangements with the Librarian to collect and make available such information.

#### Report of the Hawaii Committee on Red Cross Nursing Service

Enrollment in the nursing service of the American Red Cross has become so taken for granted by the conscientious professional nurse that the purpose for enrollment has become obscured by time and acceptance. Since many changes are now taking place in the National Red Cross Nursing Service as well as in Hawaii, it is well now to review the activities of the Hawaii Committee in the light of its changing purposes.

The Red Cross determines all of its activities in terms of its charter, which states the purpose of the Red Cross to be the prevention and amelioration of suffering from disasters of either man's or nature's making. The Na-

tional Nursing Service was established to recruit nurses for this purpose. Since war is the most far-reaching of all disasters, the Red Cross has recruited nurses for the Army and Navy Nurse Corps since 1905. The Army and Navy set the requirements and qualifications for their respective services. The Red Cross recruited for a "first reserve" only those nurses who met the requirements set by the armed services. Nurses not eligible for military service were enrolled in a "second reserve," eligible for disaster service other than war. Such was the plan followed by the Hawaii Committee when World War II struck. Such was the plan carried on in the mainland States during the largest recruitment program the Red Cross has ever undertaken.

Hawaii, however, was quite different. Its location in the theatre of war made its local nurse supply far short of its civilian needs. It was under martial law. General King, whose word was law at that time, decided it was unwise to send Hawaii nurses into the services and bring others from the mainland to care for our civilian sick. The decision not to recruit nurses from Hawaii turned out to be wise, for the Island nurses made a much greater contribution to the war effort than they would have made in the armed services. Many nurses, however, felt this a discrimination against Hawaii's nurses. Through efforts of the Hawaii Committee on Red Cross Nursing Service, the Army and Navy agreed to enlist eligible nurses from Hawaii, but the peace came too soon to allow many to complete their application. It is to be emphasized that the decision as to whether or not to accept Hawaii nurses lay entirely with the Army and Navy, and not with the Red Cross.

Another problem faced Hawaii which was not so pressing on the mainland. A large number of Hawaii's nurses were of Japanese parentage. This, to people who did not know them, meant that they were too closely associated with the enemy to be exposed to temptations of positions as officers in the armed services. This viewpoint the Americans of Japanese ancestry have understood and have accepted as not being personal, or individual, discrimination.

The Hawaii Committee on Red Cross Nursing Service appealed to the Army and the Navy to recruit nurses in Hawaii regardless of racial ancestry, or not at all.

Although no nurses of Japanese ancestry enlisted in the armed services, the National Red Cross calls attention to their tireless and faithful service in Hawaii during the war years.

Now the Army and the Navy are prepared to do their own recruiting of nurses and the Red Cross Nursing Service, having raised its child to maturity, can turn to other services which peace makes possible and necessary.

Thus the Red Cross Nursing Committee of Hawaii will turn its efforts toward those peace-time pursuits which are the responsibility of the Red Cross Chapter; namely enrollment and mobilization of nurses for disaster, the expansion of the Home Nursing instruction program and the promotion of all Red Cross peace-time activities with which nurses can help.

A different organization is necessary for this new type of program. No longer can the Nursing Committee work directly with National Nursing Service as in the past. It must be meshed with the other Chapter committees such as the Disaster Committee, the Home Nursing Committee, and the Water Safety and First Aid Committees. Therefore the Nursing Service Committee



has been made a chapter committee, appointed by and functioning through the Chapter, as do all other committees. A secretary has been assigned to the necessary secretarial work and the usual chapter channels will expedite the development of the program on all the Islands.

It is the plan of the committee to develop Red Cross Nursing Committees in each County Branch, whose responsibility it will be to keep enrollment and mobilization files and supplies and to organize and supervise activities of Red Cross nurses in that County.

This peace-time service may not be as spectacular as service in war activities but it will be essential and fundamental in our path toward an enlightened and free world. Our nurses whose daily task is service to others, extended their efforts to give more than 19,000 hours of volunteer service, without fanfare and publicity, because it was needed. This is the spirit which will guarantee that Hawaii nurses will meet the challenge, whether it be in the armed forces or in their own back yard and no matter from what race they may have come.

VIRGINIA A. JONES, *Chairman*

### Report of the Management of the Mabel L. Smyth Memorial Building

The Mabel L. Smyth Building has had a most successful year. We are in good financial condition, and your building has been used more than ever before.

There have been more demands for office space and other uses of the building than we could possibly meet, which makes us feel that the building has more than fulfilled all of our expectations for it.

May I, as retiring chairman, close by thanking all of you who have been of such great assistance to me in the past year.

Miss Eyman, manager of the building, will now present the activity report of the building.

ALBERTINE SINCLAIR, *Chairman*

#### ANNUAL REPORT, 1945

##### MAINTENANCE ACCOUNT

Balance on hand January 1, 1945.....	\$7,300.99
Income	
Rentals—Offices .....	\$5,095.00
Auditorium .....	3,054.57
Donations .....	79.28
Catering .....	1,750.63
	\$9,979.48
Expenditures	
Salaries .....	\$3,158.14
Insurance .....	35.00
Electricity .....	998.86
Water .....	194.18
Supplies .....	499.87
Office supplies .....	65.25
Air conditioning .....	106.64
Maintenance and Repair .....	757.32
Accounting and auditing .....	256.25
Unemployment Tax .....	55.75
	\$6,127.26
Net profit, 1945.....	\$ 3,852.22
	\$11,153.21

##### BUILDING ACCOUNT

Balance on hand January 1, 1945.....	\$1,088.00
Sale of 2 auditorium chairs.....	30.00
Balance Building Account, January 1, 1946.....	1,118.00
CASH BALANCE .....	\$12,371.21

#### ACTIVITY REPORT, 1945

252 committee meetings .....	2,503	present
85 teas and cocktail parties .....	6,225	"
82 luncheons and dinners .....	3,689	"
218 times auditorium .....	22,015	"
TOTAL .....	34,432	"

JESSIE EYMAN, *Manager*

### Report of the Board of Registration of Nursing

Year 1945 to March 15, 1946

The Board of Registration of Nursing has to report the slow progress that had been made until the first of this year with regard to setting up new standards for nurses and nursing schools for accreditation. The cause of this delay has been lack of members on the Board of Registration.

Since the first of the year, there have been a number of meetings and correspondence with the National League of Nursing Education regarding these projects and much progress has been made. We hope before long to state that we are ready to begin the survey of the schools. This may be subject to delay because of the lack of a qualified person to do this. Nevertheless, the League of Nursing Education suggested a suitable person and if we decide to employ her, it will not be too long before the survey is under way.

The Board is working steadily on the new rules and regulations so that we feel a new era is dawning for nursing in Hawaii.

ALBERTINE SINCLAIR, *Chairman*

#### RESOLUTION

*Whereas*, the Executive help of the Board of Registration of Nursing is insufficient to carry out the Nurse Practice Act as passed by legislature, and

*Whereas*, the work of the Nurses' Association, Territory of Hawaii, to carry out its functions as a well organized professional organization is dependent upon careful execution of the work of the Board of Registration, therefore

*Be it resolved*, that the Nurses' Association, Territory of Hawaii, recommend to the Board of Registration that they employ secretarial help during the period of setting up standards.

#### RESOLUTION

*Whereas*, Dr. James A. Morgan has been a member of the Board of Registration of Nursing, Territory of Hawaii, since the year 1930, serving the nurses of the Territory of Hawaii by acting as Secretary of the Board of Registration, and

*Whereas*, in this capacity he has rendered invaluable assistance in matters pertaining to reciprocity with other States and Territories, points of law, and making investigations of legal and nursing subjects, and

*Whereas*, we the members of the Nurses' Association, Territory of Hawaii, wish to express our thanks and appreciation to Dr. Morgan in recognition of these services; therefore,

*Be it resolved*, that Dr. James A. Morgan be made an Honorary Member of the Nurses' Association, Territory of Hawaii.



### Report of Nurses' Association City and County of Honolulu

At the end of 1945 we had 204 members. Today we are seating 28 delegates for 234 members. We have 13 applicants for our April meeting. We attribute this increase to:

1. Interesting and stimulating meetings every month with well planned programs.

2. The *Nurses' Bulletin* in the HAWAII MEDICAL JOURNAL which every member receives.

3. The recruitment of members by the Director of the Nursing Service Bureau, the Bureau of Public Health Nursing, and the Directors of Nursing in the hospitals.

A hostess is appointed in each agency to invite newly arrived nurses as guests to our meetings, and to bring each new member to her first meeting.

Believing that a good member of the Nurses' Association begins in the nursing school we have sent invitations to the nursing schools for the senior students to attend our meetings. Now we are sending announcements to the President of each senior class, hoping to arouse interest in our meetings among the students themselves. We hope that this education will benefit the other counties as these nurses graduate and move to your areas.

We have an active private duty section which meets once a month to promote activities and education among that group.

We have an active industrial nurse section whose chairman you heard this morning.

It is our hope to stimulate enough interest among the office nurses, and among the staff duty nurses to form sections for their groups.

We have appointed a committee on wages, hours and personnel policies this year which will work on standards and improvement of working conditions.

ROSIE K. CHANG, *President*

### Report of the Nurses' Association County of Kauai

The Kauai Nurses' Association had 46 paid members for the year 1945. So far, for 1946, we have 39 paid members. We hope the increase in dues will not cause our membership to drop this year.

Throughout 1945 we had very good attendance at all our meetings. Our programs were interesting and, we hope, stimulating.

We have had two projects this year which have turned out very successfully.

Our Association wanted to make a contribution to the fund for the Convalescent Nursing Home, but there was very little money in our treasury. A committee was appointed to study ways and means of raising enough for a donation. The Chairman, Elizabeth Middleton, had at one time belonged to the Hawaii Association and remembered their "White Elephant Sales." We decided to try one on Kauai.

The committee worked hard. Our members and friends were canvassed. The "Elephants" sent in were many, some wonderful, some weird! Before the sale a group met to wrap the articles—they were classified as "low in value," "medium," or "high"—as an aid to the

auctioneer in controlling the bidding and also to protect the buyers to a certain extent.

The auction was held on March 8 in the Nurses' Home of the Wilcox Memorial Hospital. Tea and cookies were served before the sale, at a charge of 10 cents. We were determined to make as much money as possible from this venture!

We were most fortunate in getting Mr. J. N. McCall for our auctioneer (husband of Estelle Annesser McCall). He was wonderful and we owe him a debt of gratitude for keeping the bidding at a fever pitch, causing the dollars to come rolling in. He was also very brave as all our buyers were women.

When the auction was finally over, we found to our great delight that our receipts were a little over \$600.00—giving us enough money to completely equip one private room. We look forward with pride to the day when a plaque over the door of that room will read "Furnished by the Kauai Nurses' Association."

Fourteen years ago, on March 14, 1932, the Kauai Nurses' Association came into being. We held our meeting of organization at Poipu, in the beach home of Mabel Wilcox, and at that time made her our first president. In spite of her objection, she has been continuously forced to stay in office.

However, this past December, she told us firmly, that she must be relieved of her presidential duties.

The Kauai members were anxious to honor Miss Wilcox, but wanted to surprise her. We decided to have a formal dinner party, celebrating the 14th Anniversary of our Association, but only told her enough of the plans to keep her from being suspicious.

The dinner was given in the Nurses' Home of the Wilcox Memorial Hospital which is centrally located and has excellent facilities. Forty-eight nurses were present, including ten charter members. The tables were beautifully decorated with flowers and candles—the place cards were cut-out photographs of Miss Mabel and were draped with miniature leis.

The climax of the evening came when Miss Wilcox was presented with a Life Membership in the National Organization of Public Health Nursing. She worked for many years in this field and made an outstanding contribution to the Island of Kauai. We felt this life membership in the N.O.P.H.N. made a most appropriate gift with which to honor her.

THELMA HENSLEY, *President*

### Report of the Hawaii County Nurses' Association

I bring you Aloha and greetings from Hawaii. We have had one annual and eight regular meetings in the last year, and three meetings of the Executive Committee. All regular meetings are held at noon on the first Tuesday in the month at the Hilo Hotel, with an average attendance of thirty. We extend an invitation to all visiting nurses to meet with us when in Hilo. Just register with the hotel management and join us in our meetings. Dues were raised from five to ten dollars with no loss of membership due to the raise. Funds for donations are raised through "white elephant" sales. They are enjoyable affairs, and articles rotate. Our present project is the collection of uniforms and useful materials to send to the Public Health Nurses of the

Philippines, and we can always depend on lively participation from members, nurses, and friends. Mrs. Thelma Patten has been appointed our representative on the Council of Social Agencies, a new representation. There was a man nominated, but we had several members present who insisted that a woman represent our group. The HAWAII MEDICAL JOURNAL is being received and enjoyed, and with our new publicity chairman there will be more news from Hawaii. We wish to extend an invitation to our Executive Secretary to visit us so that we can have a better understanding of her work and what she expects from us. Our By-Laws have been revised and printed and every member received a copy. Each member considers herself on the membership committee, and we believe that there is no reason for not belonging to the Association, and every reason to belong. We carry the theme in our Association that "No one can do anything for us that we cannot do for ourselves."

JOSEPHINE HALL, *President*

## Report of the Maui County Nurses' Association

We are a little ashamed after hearing of the activities from Hawaii. Last year we had only four regular meetings and one annual meeting. This year we plan to have meetings every two months, because we believe that more frequent meetings increase interest in our Association. At our annual meeting, we had about thirty people present, and had a very enjoyable time. I was told this morning that there are about thirty members on Maui, but we had only sent in sixteen names. Next year we shall have as many delegates as we are entitled to. We will make an effort to bring in all new members before the Territorial Convention. It has been an inspiration here to learn what the other County Associations are doing, and I am sure it will help us on Maui to have the delegates take back this news. I know it will be a stimulation to us all.

BETSY BOYLIN, *Secretary*

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*Literature and Sample on Request*

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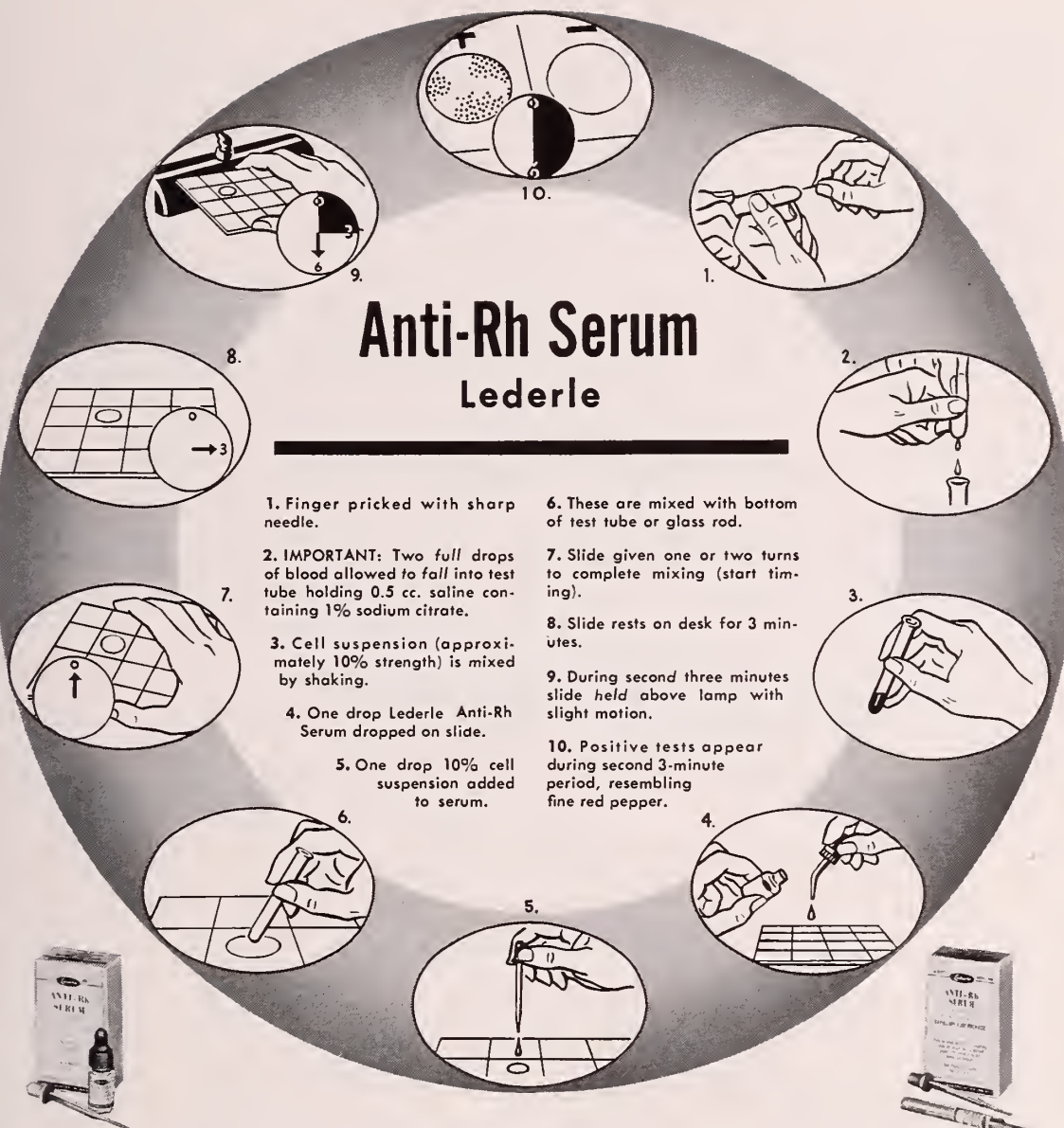
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1. Finger pricked with sharp needle.

2. **IMPORTANT:** Two full drops of blood allowed to fall into test tube holding 0.5 cc. saline containing 1% sodium citrate.

3. Cell suspension (approximately 10% strength) is mixed by shaking.

4. One drop Lederle Anti-Rh Serum dropped on slide.

5. One drop 10% cell suspension added to serum.

6. These are mixed with bottom of test tube or glass rod.

7. Slide given one or two turns to complete mixing (start timing).

8. Slide rests on desk for 3 minutes.

9. During second three minutes slide held above lamp with slight motion.

10. Positive tests appear during second 3-minute period, resembling fine red pepper.

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\*Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154

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2. Hill, I. G. W., and Guest, A. I.: *Brit. M. J.* **2**:6, 1945.
3. A Critical Study of Seasickness Remedies, No. 4, Royal Naval Medical Bulletin **24**:3, 1943, abstracted, *Bulletin of War Medicine* **18**:1242, 1944.
4. Lillenthal, J. L.: *J. Aviation Med.* **16**:59, 1945.



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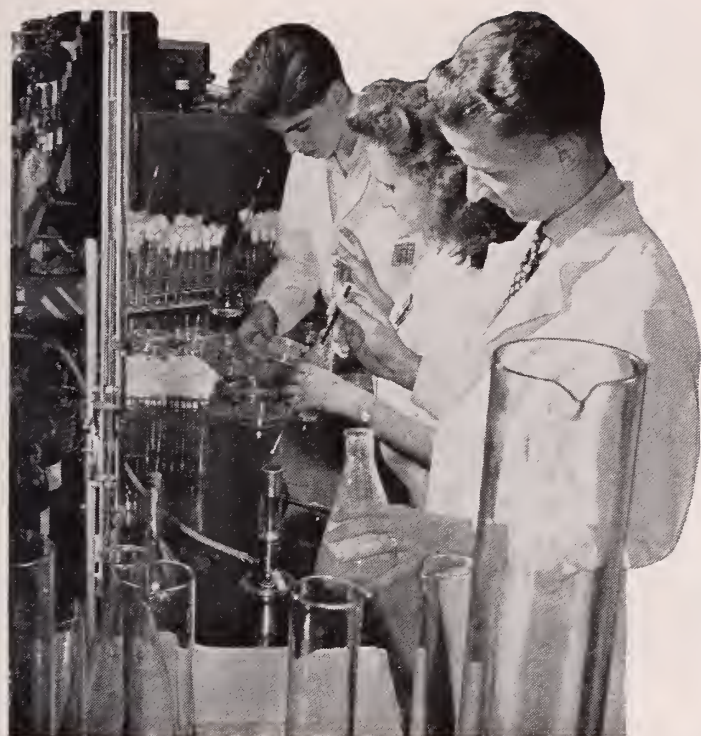
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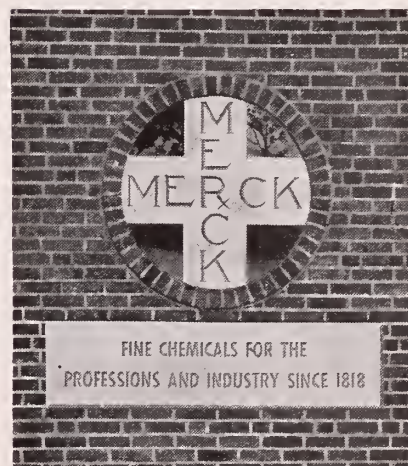
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\*Dickinson, R. L.: J. A. M. A. 128:490, June 16, 1945.

*Sculpture prepared under the direction of  
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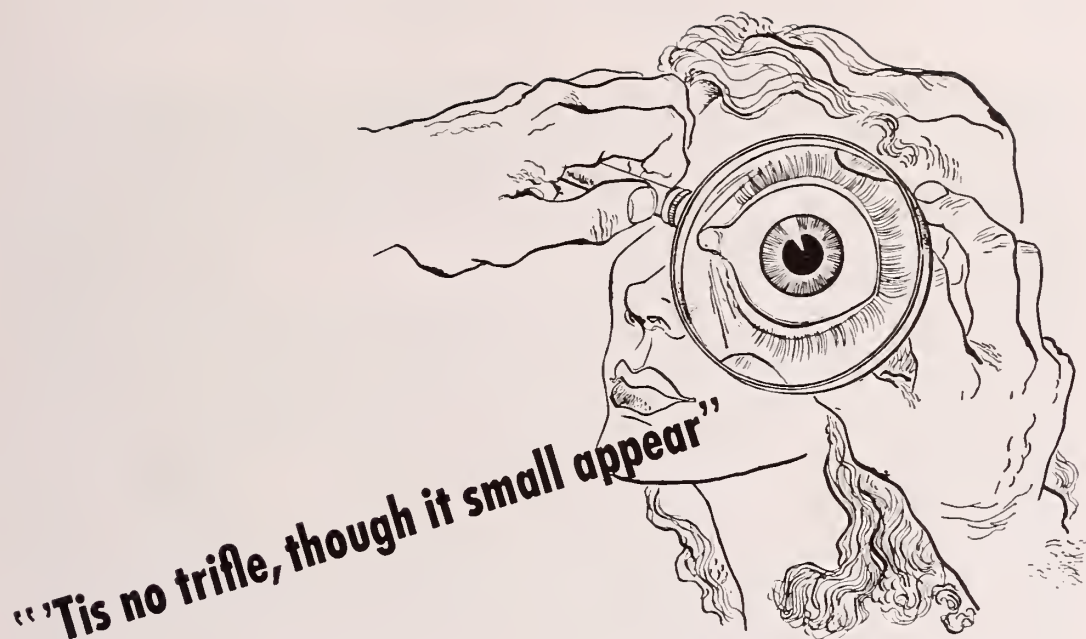
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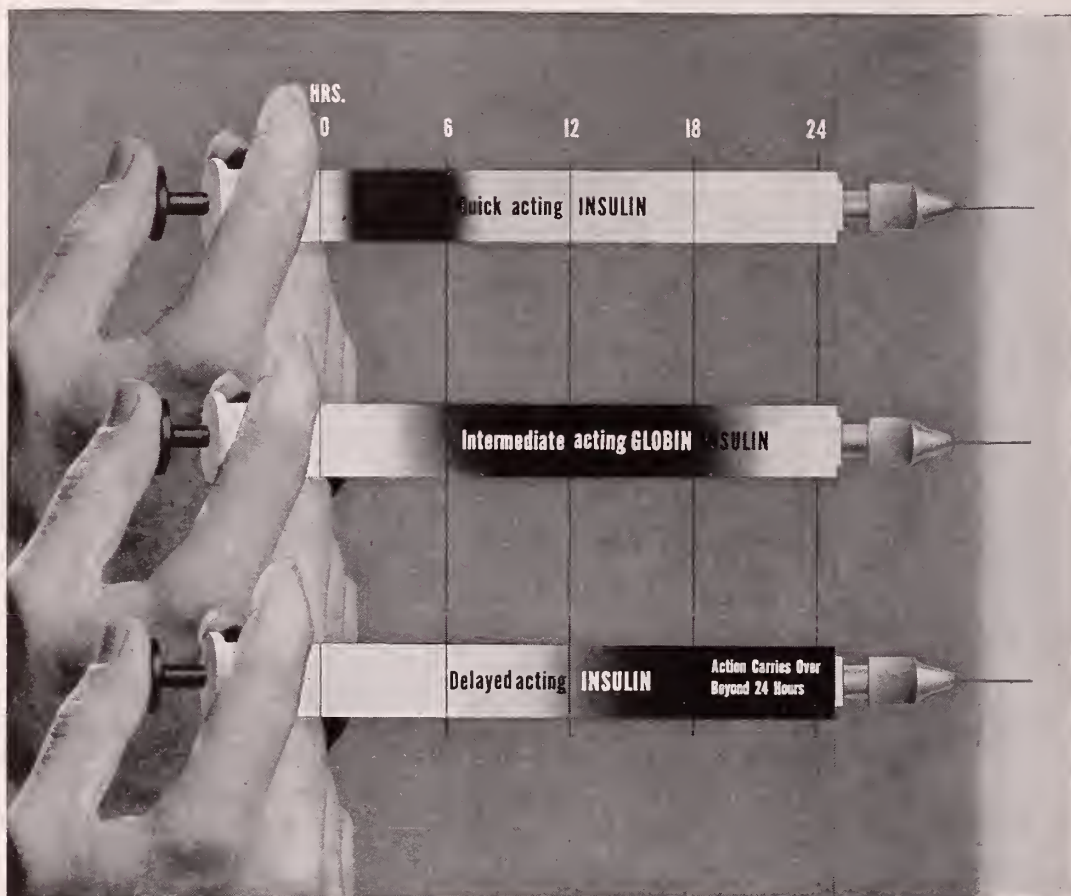


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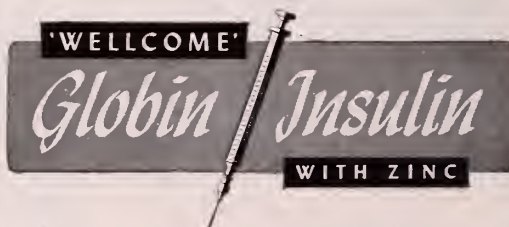
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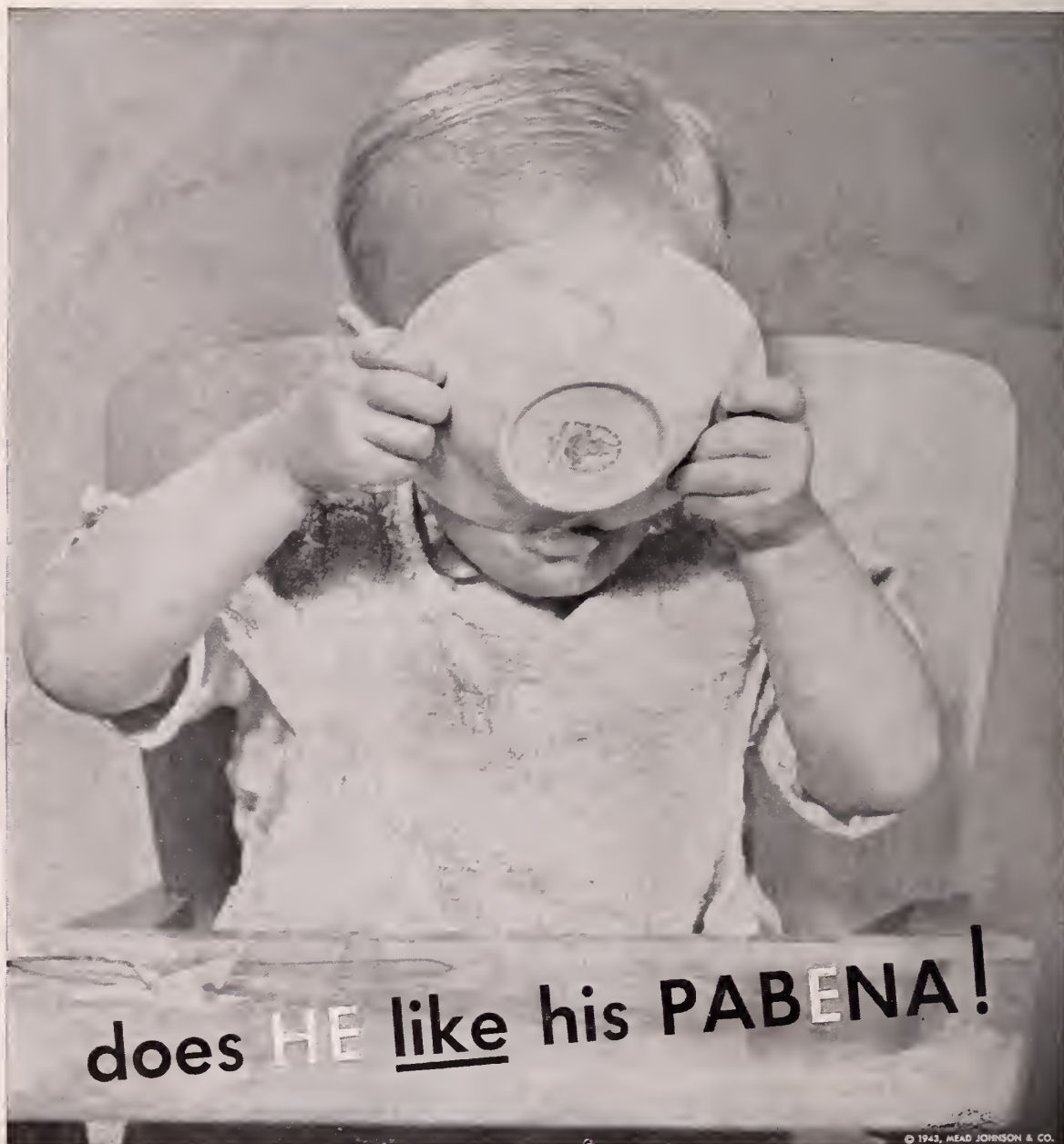
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## ELECTROCARDIOGRAPHIC RESPONSE TO EXERCISE

HENRY C. GOTSHALK, M.D.

AND

ALFRED S. HARTWELL, M.D.

## GERMAN MEASLES IN PREGNANCY

(EDITORIAL)

## TRANSACTIONS

FIFTY-SIXTH ANNUAL MEETING

HAWAII TERRITORIAL MEDICAL ASSOCIATION

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## INDEX

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# ELECTROCARDIOGRAPHIC RESPONSE TO EXERCISE IN 100 NORMAL SUBJECTS

HENRY C. GOTSHALK, M.D. AND ALFRED S. HARTWELL, M.D.  
HONOLULU

This study was made to determine the effect of vigorous exercise on normal human subjects as recorded by the electrocardiograph. Most of the literature on this topic has centered upon changes in the electrocardiogram after exercise in persons with heart disease. Frequently there has been insufficient emphasis on changes which one might find in normal individuals.

Much of the earlier work has been done in Europe. Schlomka, Reindell and Malamani<sup>1</sup> wrote a scholarly paper in which they studied 56 normal subjects between the ages of 18 and 25. Kostjukow and Reiselmann<sup>2</sup> compared the effects of exercise on the electrocardiograms of porters and tailors. The former were used to physical exercise and the latter were of sedentary habits. Examples of the numbers of normal subjects used by various authors are Reindell and Delius<sup>3</sup>; Rosenberger<sup>4</sup> 18; Kammerer<sup>5</sup> 20; Rihl et al<sup>6</sup> 50; Holzmann<sup>7</sup> 59; Messerle<sup>8</sup> 16. Most of these observers reported multiple minor changes; the latter author gives a fairly complete account of the changes noted. More recently one of us (A.S.H.) et al<sup>9</sup> recorded in detail the results on 5 subjects. Master, Friedman and Dack<sup>10</sup> have done a great deal of work on a standardized exercise test using a "two-step" set of stairs. They report their results in 65 normals.

Barrow and Ouer<sup>11</sup> recorded changes in a group of 100 normal men following participation in active sports such as handball and badminton. In their series, no "distortion" of the S-T segment was observed. In four-fifths of the men studied, the most common change was in the height of the Q-R-S complex.

## METHODS

In the group selected, 31 were females and 69 were males. The ages of our subjects varied from 15 to 42. Forty-eight subjects were between the ages of 15 and 20; 32 between 21 and 30 years; 14 between 31 and 40 years; and 6 between the ages of 41 and 42.

A careful study was made of each subject's past medical history to determine if there had been any previous cardiac symptoms. There had been none, and no subject had had rheumatic fever. Most of the group studied were active in athletics. A general cardiac examination, including a careful fluoroscopic study of the cardiac silhouette, was done on each subject.

All of our tracings were made with either a Sanborn Cardiette or a General Electric portable model machine. The normal record was made after the subject had rested for ten minutes. The second tracing was made immediately after the exercise test. All electrocardiograms were made with the subject in the recumbent position and each lead was standardized before the record was made.

The exercise test used was as follows: The subject stood erect with his left hand resting lightly on the edge of a table. This was followed by a knee-bending exercise, 30 times in thirty seconds, coming to the erect position after each squat. In order to familiarize the candidate with the procedure, a trial was made before electrocardiographic studies were begun. Blood pressure readings were made before and after exercise.

## RESULTS

The average resting pulse for the 100 candidates was 77.3. Immediately after exercise the average cardiac rate was 103.5, showing a fair cardiac response to this test. The blood pressure taken before exercise showed an average systolic level of 117.5 mm. of mercury and an average diastolic pressure of 74.9. After exercise the systolic pressure rose to an average of 131.5 mm. of mercury while the diastolic fell to an average of 66.8 mm. of mercury.

## P-WAVES

### *Before Exercise*

The normal P-wave in Lead 1 varied in amplitude from 0.25 mm. to 1.5 mm. with an average of 0.66 mm.

<sup>1</sup> Schlomka, G., Reindell, H. and Malamani, V.: *Electrocardiography During Exercise Tests*, Ztschr. f. klin. Med. 136: 367, 1939.

<sup>2</sup> Kostjukow, I. I. and Reiselmann, S. D.: *Changes in Electrocardiogram After Dosed Physical Exercise*, Arbeitsphysiol. 3: 415, 1930, and 5: 1, 1931.

<sup>3</sup> Reindell, H. and Delius, L.: *Electrocardiogram After Work Test*, Klin. Wchnschr. 20: 497, 1941.

<sup>4</sup> Rosenberger, I.: *Electrocardiographic Registration of Work Tests*, Wien. klin. Wchnschr. 47: 648, 1934.

<sup>5</sup> Kammerer, H.: *Electrocardiogram With Subject at Rest and After Exertion*, Munchen med. Wchnschr. 85: 1428, 1938.

<sup>6</sup> Rihl, J. et al: *Electrocardiogram After Exercise*, Ztschr. f. Kreislauf forsch, 27: 659, 1935.

<sup>7</sup> Holzmann, M.: *Work Test Registered in Electrocardiogram*, Deutsche Med. Wchnschr. 62: 685, 1936.

<sup>8</sup> Messerle, N.: *Changes in Electrocardiogram Following Exercise*, Ztschr. f. d. ges. Exp. Med. 60: 490, 1928.

<sup>9</sup> Hartwell, A. S., Burrett, J. B., Graybiel, A., and White, P. D.: *The Effect of Exercise and Four Commonly Used Drugs on the Normal Human Electrocardiogram*, J. Clin. Investigation 21: 409, (July) 1942.

<sup>10</sup> Master, A. M., Friedman, R. and Dack, S.: *Electrocardiogram After Standard Exercise as a Functional Test of the Heart*, Am. Heart J. 24: 777, (Dec.) 1942.

<sup>11</sup> Barrow, W. H., and Ouer, R. A.: *Electrocardiographic Changes With Exercise*, Arch. Int. Med. 71: 547, (April) 1943.



In Lead 2 the height of the P-wave varied from 2.0 mm. to 0.25 mm. with an average height of 1.24 mm.

In Lead 3 the highest positive deflection was 2.10 mm. and the greatest negative deflection was minus 0.75 mm. The average height of P-3 was 0.76 mm. for the positive deflection and 0.37 mm. for the negative deflection. The P-wave was inverted in 11 instances in Lead 3 and was diphasic in 6 instances.

In Lead 4 the highest deflection measured 1.0 mm. on the positive side and minus 2.0 mm. on the negative side. The lowest positive deflection was 0.15 mm. and the lowest negative deflection was minus 0.15 mm. In Lead 4 the P-wave was diphasic or iso-electric in 42 cases. In 14 electrocardiograms P-4 was inverted.

### *After Exercise*

In 37 electrocardiograms no change in the height of the P-waves after exercise was observed.

### *Increase in Height of P-Waves:*

Increases in the height of the P-wave in Lead 1 occurred in 3 instances. This increase varied from 0.25 to 0.5 mm. with an average of 0.41 mm.

In Lead 2 the height of the P-wave was increased in 43 electrocardiograms after exercise. The increase in height of the P-wave varied from 0.5 to 2.0 mm. with an average increase of 0.63 mm.

In Lead 3 the height of the P-wave increased in 33 instances. This increase varied from 0.25 mm. to 1.0 mm. with an average of 0.59 mm. In 2 instances a negative P-wave became positive.

In Lead 4 the height of the P-wave was increased—by 0.5 mm.—in only 2 instances.

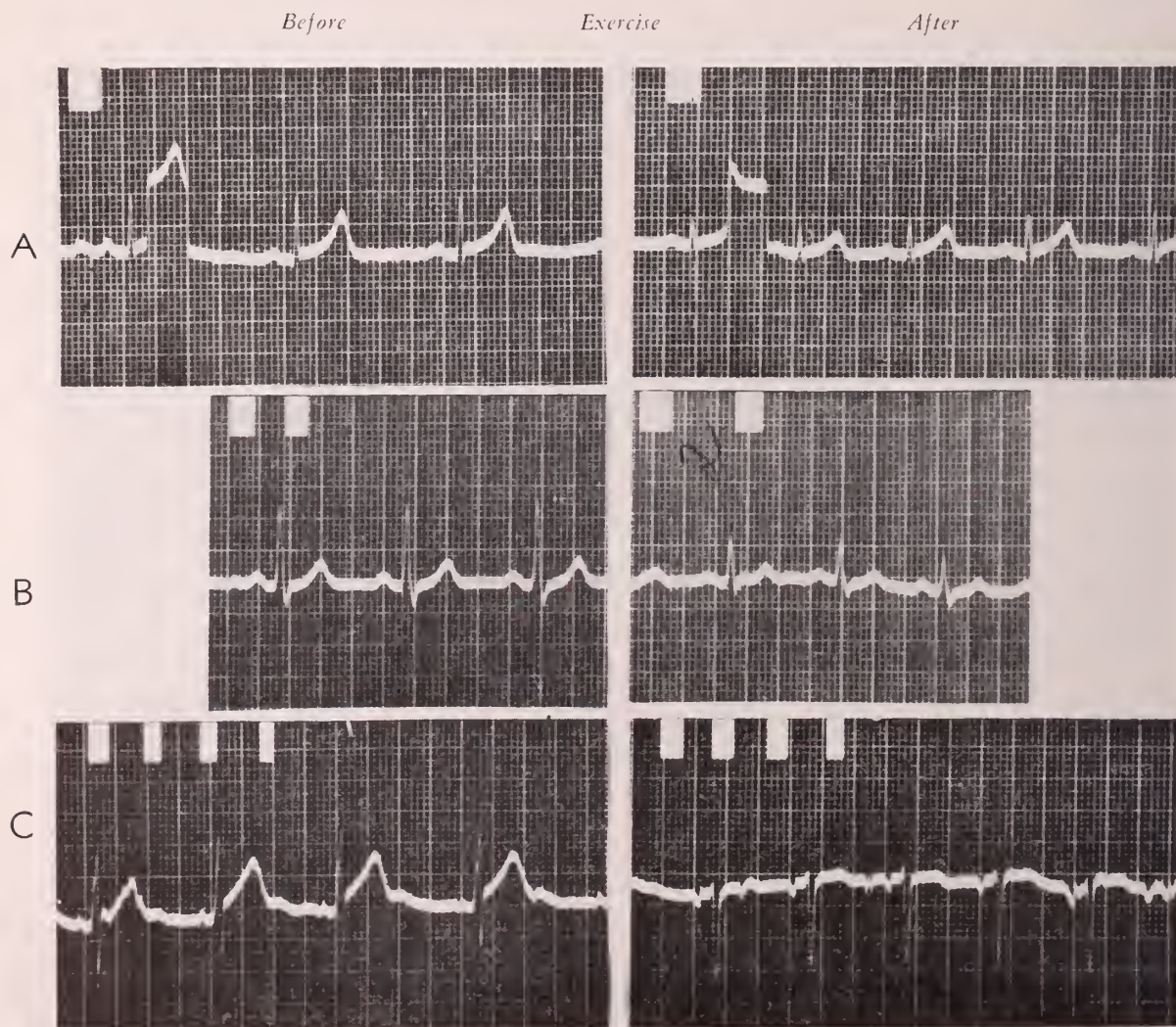


FIG. 1. (a) Lead 1. Note effect on the height of the Q-R-S and T Waves following exercise. (b) Lead 2. A similar change. (c) Lead 4. A marked change in the pattern caused by exercise.

*Decrease in Height of P-Waves:*

In 24 instances the height of the P-wave in Lead 1 was diminished. This diminution varied from 0.25 mm. to 0.75 mm. with an average decrease of 0.36 mm.

The amplitude of P-2 was diminished in 9 electrocardiograms. This decrease varied from 0.25 to 2.0 mm. with an average decrease of 0.8 mm.

In Lead 3 the height of the P-wave was lowered in 7 tracings. These changes varied from 0.25 to 1.0 mm. with an average diminution of 0.55 mm.

The height of P-4 was diminished in 12 instances. This diminution varied from 0.25 to 0.75 mm. with a mean of 0.37 mm. In two electrocardiograms a positive P-wave became negative.

## P-R INTERVAL

*Before Exercise*

In this series of electrocardiograms the P-R interval varied from 0.12 to 0.20 seconds with a mean average of 0.156 seconds.

*After Exercise*

In 63 electrocardiograms no change in the P-R interval was noted in any leads.

*Increase in P-R Interval:*

An increase in the P-R interval was seen in 4 electrocardiograms, varying from .01 to .02 seconds. These changes occurred in isolated leads only.

*Decrease in P-R Interval:*

There was a decrease in the P-R interval in 33 tracings. In 4 instances there was a diminished P-R interval in all 4 leads. These changes varied from .01 to .04 seconds. In 9 cases a decrease was noted in the first 3 leads varying from .01 to .02 seconds. In Leads 1 and 2, 7 instances were recorded showing a decrease in the P-R interval. These changes varied from .01 to .02 seconds. In Leads 2 and 3 a decrease was noted in 3 instances. This decrease varied from .01 to .02 seconds.

## Q-R-S

*Before Exercise*

The width of the Q-R-S varied from .05 to .10 seconds with a mean average of .072 seconds.

*After Exercise*

After exercise no appreciable change was noted in 83 electrocardiograms.

*Increase in Width:*

In Leads 3 and 4 there were 5 instances where the Q-R-S was increased .01 seconds.

*Decrease in Width:*

In 12 tracings there was a shortening of the Q-R-S varying from .01 to .02 seconds and seen principally in Leads 1, 2 and 3.

Occasionally minor increases or decreases could be measured in the isolated leads.

*Changes in Height:*

The most striking changes after exercise in the height of the Q-R-S complex occurred in Leads 1 and 2. In both of these leads no increase in the height of the Q-R-S was observed. In Lead 1, 87 tracings showed a decrease in the height of the Q-R-S varying from 0.5 mm. to 5.0 mm. with an average of 1.5 mm. In Lead 2, 60 tracings showed a diminution in voltage of the Q-R-S varying from 0.25 mm. to 5.5 mm. with an average of 1.6 mm. In Leads 3 and 4, no constant changes were observed.

## S-T SEGMENT

*Before Exercise*

In the resting subject depression of the S-T segment was noted in only 5 tracings. This change was seen once in Lead 2; 3 times in Lead 3 and once in Lead 4. All were 0.3 mm. in depth.

Elevation of the S-T segment was seen in 60 tracings. These changes occurred principally in Lead 4 either alone or in combination with elevations in other leads. In Lead 2 this elevation varied from 0.25 mm. to 1.0 mm. with a mean in Lead 2 of 0.74 mm. In Lead 3 the average was 0.69 mm. In Lead 4, 45 tracings showed an elevated S-T segment varying from 0.5 to 2.5 mm. with a mean reading of .95 mm.

*After Exercise*

The S-T segment immediately after exercise showed little or no change in 70 electrocardiograms.

*Elevation of S-T Segment:*

Increase in elevation of the S-T segment was noted in 9 instances in Lead 4 averaging 0.8 mm. This increase was usually associated with depressed changes in other leads. The elevation varied from 0.5 mm. to 1.0 mm. In Lead 3 alone, only 1 instance showing an increase in the height of the S-T was recorded. This measured 0.5 mm.

*Depression of S-T Segment:*

Depression of the S-T segment below the iso-electric line in one or more leads was noted in 23 electrocardiograms. These changes were noted principally in Leads 2 and 3 alone or in combination with changes in other leads. In Lead 2, 15 tracings showed a depression below the iso-electric line varying from 0.25 to 1.0 mm. with a mean of 0.59 mm. In Lead 3, 14 tracings showed an S-T depression varying from 0.5 to 1.0 mm. with an average of 0.57 mm. In Lead 4 the S-T segment was depressed below the iso-electric line in only 2 instances with an average of 0.5 mm.

## T-WAVE

*Before Exercise*

The average normal T-wave in Lead 1 of this series of electrocardiograms measured 2.5 mm. in height.



In Lead 2 the average height measured 3.04 mm.

The mean height of positive readings in Lead 3 measured 1.0 mm. In the 17 inverted T-waves the average amplitude was minus 0.9.

In Lead 4 the average height was 3.2 mm. in upright T-waves and minus 1.2 mm. in the 3 tracings that showed an inverted deflection.

#### *After Exercise*

There were no increases in amplitude of the T-wave in Leads 1 and 2 in any of the tracings studied.

#### *Increase in T-Waves:*

In Lead 3 there were 16 tracings that showed an increase in the height of the T-wave. All of these changes were associated with a decrease in amplitude of the T in other leads.

In 30 instances in Lead 4 there was an increase in the amplitude of the T-wave. These changes too, were associated with the decrease in height of the T in other leads. The increase in amplitude recorded varied from 0.5 to 3.0 mm. with a mean average of 1.2 mm.

#### *Decrease in T-Waves:*

In Lead 1, after exercise, decreases in the height of the T-wave were noted in 83 electrocardiograms. This decrease averaged 1.0 mm. in height.

In Lead 2, decrease in amplitude of the T-wave was noted in 64 tracings. These changes averaged 0.8 mm. and were seen principally in combination with Lead 1.

The T-wave in Lead 3 changed from upright to inverted after exercise in 1 tracing.

The T-wave in Lead 4 changed from positive to negative in 2 tracings after exercise.

#### DISCUSSION AND SUMMARY

The purpose of this paper is to record the elec-

trocardiographic changes in normal individuals following a rather strenuous exercise test. Most of the subjects used in this series were healthy adults who engaged in various competitive sports. The test used by us is not recommended for patients suspected of having coronary heart disease, because it is too strenuous if done properly. For this purpose the "Two-Step" exercise of Master<sup>12</sup> is certainly more suitable.

Some of the interesting changes observed by us were as follows: There was frequently an increase in the height of the P-wave in Leads 2 and 3 following exercise. This change was seen in Lead 2 in 43 tracings and 33 records showed this change in Lead 3.

There was a noteworthy diminution in the height of the Q-R-S, particularly in Leads 1 and 2. These changes were seen in 87 tracings in Lead 1, and 60 tracings in Lead 2 (Fig. 1).

The S-T segment and T-wave changes following exercise were of special interest. Elevation of the S-T segment following exercise was rarely noted by us. In fact, the group that showed an elevated S-T segment tended most strongly to return to normal or go below the iso-electric line following exercise.

Depression of the S-T segment below the iso-electric line was seen principally in Leads 2 and 3. In Lead 2, 13 tracings showed a depression varying from 0.25 mm. to 1 mm. (Fig. 2).

Lowering in amplitude of the T-wave following exercise was noted in 83 records in Lead 1 and 64 tracings in Lead 2.

#### CONCLUSION

Changes in the electrocardiograms of 100 normal individuals following a strenuous exercise test are reported.

<sup>12</sup> Master, A. M.: Electrocardiogram After Exercise, U. S. Nav. M. Bull. 40: 346, (April) 1942.

#### *Before Exercise*

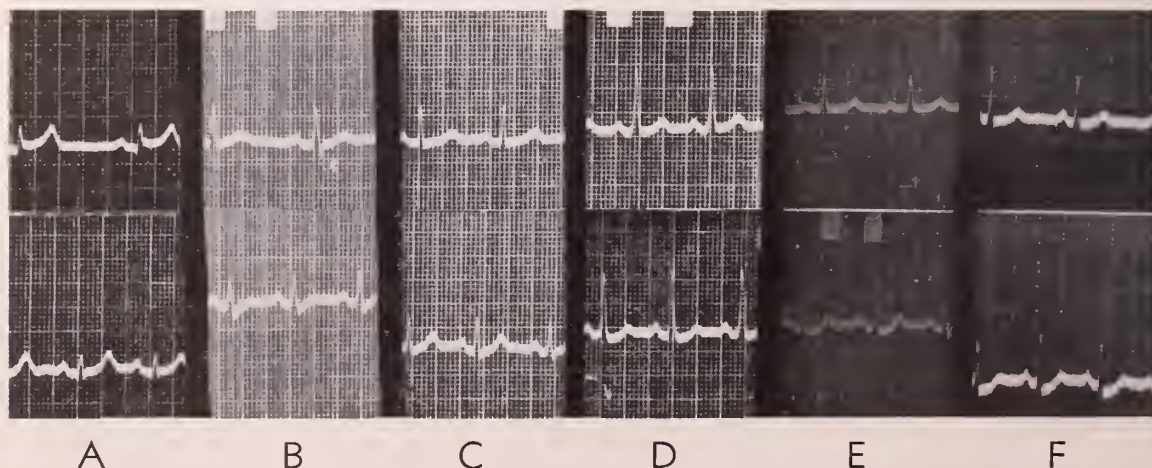


FIG. 2. All tracings are from Lead 2, demonstrating changes in S-T segments in young healthy adults. (a) An elevated S-T segment becomes isoelectric. (b) (c) (d) (e) (f) Show isoelectric S-T segments which become depressed.



# The Sulkowitch Test in the Diagnosis and Management of Hypocalcemic Tetany of Newborns and Infants

T. YOSHINA, M.D.

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Barney and Sulkowitch<sup>1</sup> introduced, in 1937, a simple test to detect calcium excreted in the urine. Albright<sup>2</sup> in 1939 outlined a method of management of hypoparathyroid tetany in the adult. Since this condition is due to a low level of calcium in the blood, he used dihydrotachysterol to raise the blood calcium level and the Sulkowitch solution<sup>3</sup> to estimate this level by testing the urine.

Albright states that the level of calcium in the serum of a normal person is from 9.5 to 11 mg. per 100 cc.; that of a completely parathyroidectomized person from 5 to 7 mg. The renal threshold for the excretion of calcium in the urine is 7.5 mg. to 9 mg. per cent. Thus the normal level of calcium in blood is above the renal threshold. Therefore the urine of a normal person should contain calcium.

When an equal amount of Sulkowitch solution and urine are mixed, a fine white precipitate should be formed; this indicates that calcium is present in the urine and that the calcium level of the blood is satisfactory. If no precipitate is formed, there is no calcium in the urine and the calcium level of the blood is below the renal threshold. Should the test show a heavy precipitate which is milky in appearance it denotes hypercalcemia.

Bloxsom<sup>4</sup> in 1940, in the management of tetany of the newborn infant with dihydrotachysterol, determined serum calcium and phosphorus and tested for calcium in the urine with Sulkowitch reagent. He noted that calcium was not being excreted in the urine when the calcium of the blood was low; but when the level reached normal, the Sulkowitch test reacted positively.

To establish the diagnosis of hypocalcemic tetany the serum calcium level should be determined. This may not be possible. Venipuncture on a newborn or an infant is difficult unless one is experienced in doing this. The patient may have physical conditions such as seborrhoea or eczema or infected intertrigo at the sites commonly used for venipuncture which may make phlebotomy impossible.

There may be technical difficulties even after the blood has been withdrawn for analysis, and the result obtained may be unreliable.

On several cases where hypocalcemic tetany was suspected in infants, the Sulkowitch test was used for diagnosis and management with gratifying results. The following are selected cases:

CASE 1: M. M., a 1½ month old Japanese female infant, was brought to the office on May 15, 1944 because of noisy inspiration which started shortly after discharge from the nursery. She would arch her back while nursing and was rather restless. Family history was non-contributory, except that the mother took only one pint of milk throughout the pregnancy. Labor was at term and lasted about thirty-six hours. Birth weight was 7 lbs. 7½ ozs. Postnatal condition was uneventful. She was breast fed and was receiving 6 drops of haliver oil daily. Physical examination was essentially negative. The child was sent home with instructions to increase the haliver oil to 15 drops. Within thirty minutes she was brought back because of convulsion. Carpopedal spasm was present. Chvostek's and Trousseau's signs were difficult to elicit because of crying. The Sulkowitch test of the urine was negative: no precipitation. The child was hospitalized and 5 cc. of 10% calcium gluconate was given intramuscularly. Calcium lactate was given orally with each feeding. Subsequent Sulkowitch tests were positive. Neither twitchings nor convulsions were noted after the test became positive and the noisy respiratory sound was not noted in the hospital. X-ray of the chest showed no abnormality and the spinal fluid examination was negative.

CASE 2: C. B. I was called in by Dr. C. L. Phillips to see a 14 day old part-Hawaiian male infant because of convulsion on Sept. 28, 1943. The child was delivered by Cesarean section; birth weight was 8 lbs. 4 ozs. He was breast fed and given a complementary evaporated milk formula. When he was 8 days old he appeared apprehensive and was restless. On the eleventh day he had a convulsion and another seizure on the fourteenth day. Family history: Mother was unable to take milk during pregnancy because of vomiting. She took 6 calcium pills daily. She had a hyperthyroid appearance and a B. M. R. of plus 23 on the thirteenth postoperative day. Physical examination on the child showed carpopedal spasm. Chvostek's sign could not be elicited because of crying. Temperature was normal. Tetany was suspected and 10 cc. of 10% calcium gluconate was given intramuscularly and calcium lactate 1 gram was added to each feeding. The laboratory was not prepared to run calcium determinations for several days. A Sulkowitch test on a specimen of urine obtained eight hours following the beginning of calcium therapy was positive. Twitchings gradually diminished in intensity and frequency. Subsequent Sulkowitch tests were negative and in spite of calcium intramuscularly, intravenously and

<sup>1</sup> Barney, J. D. and Sulkowitch, H. W.: Progress in the Management of Urinary Calculi, *J. Urology*, 37: 746, (June) 1937.

<sup>2</sup> Albright, F.: Note on Management of Hypoparathyroidism with Dihydrotachysterol, *J.A.M.A.* 112: 2592, (June 24) 1939.

<sup>3</sup> 2.5 gm. of oxalic acid, 2.5 gm. of ammonium oxalate, and 5 cc. of glacial acetic acid are dissolved in distilled water and made up to a volume of 150 cc.

<sup>4</sup> Bloxsom, A.: Treatment of Tetany of the Newborn Infant with Dihydrotachysterol, *J. Ped.* 16: 344, (March) 1940.

orally, twitchings continued. Six days following the beginning of calcium administration the test was still negative and the first dose of 20 units of parathyroid extract was administered; the following morning the Sulkowitch test was positive and remained positive thereafter. After the second dose of parathyroid extract, twitchings and convulsions disappeared completely. The child improved rapidly and today at 2½ years of age he is well and healthy.

CASE 3: E. E. H. I was asked by Dr. C. L. Phillips to see a 2½ day old Caucasian girl who was having frequent twitchings and convulsions ever since fifty hours of age. She was born on April 2, 1946 after nine and one half hours of apparently normal labor. Birth weight was 7 lbs. 15½ ozs. The family history was irrelevant except mother took hardly any milk during the pregnancy. Her serologic test for syphilis was negative. Physical examination revealed a child with twitchings of facial muscles and clonic movements of both hands and feet which were pronounced on the right side. Anterior fontanel was small and soft. There was no evidence of caput succedaneum or cephalhematoma. Moro reflex was negative and tonic neck reflex was present. Chvostek's and Trousseau's signs were difficult to elicit because of twitchings. Pupils were equal and round and reacted to light. The Rh factors were positive in both the mother and the daughter. Synkamin 1 mg. was given subcutaneously and because parathyroid tetany was suspected paroidin 1/20 cc. (5 units) was given every four hours for 4 doses and calcium lactate 5 grains were given with each feeding. The Sulkowitch test was still negative the following morning. Five cc. of 10% calcium gluconate were given intramuscularly. Shortly after this, which was about twenty hours after the beginning of treatment, twitchings ceased completely and the Sulkowitch test was positive. The final dose of paroidin and 5 cc. of 10% calcium gluconate were administered. The 2 subsequent Sulkowitch tests on successive mornings were negative but since twitchings and convulsions were absent further active treatment was not given except that calcium lactate orally was continued. The child made an uneventful recovery and was discharged from the nursery in excellent condition.

CASE 4: Y. C. A. I was asked by Dr. A. Orenstein to see a 3 day old Chinese male infant because of convulsions. He was born on January 2, 1945 at full term after an apparently normal labor of six and one half hours duration. Birth weight was 8 lbs. 10 ozs. Family history was non-contributory except that the mother took very little milk during pregnancy. Her blood Wasserman reaction was negative. When the child was fifty-three and one half hours old slight twitchings of the face were noted. Physical examination done between the convulsive seizures was essentially negative. Because of lack of precipitate with the Sulkowitch solution in the urine, this was considered as a case of hypoparathyroid tetany and calcium was given intravenously and intramuscularly and as calcium lactate orally. Parathyroid extract was used and 10 drops of oleum percomorphum were given daily. The Sulkowitch test was persistently negative for eighteen days and convulsions and twitchings continued. On the eighteenth day the test became positive and remained positive thereafter but convulsions and twitching persisted for a week. The child was sent home on 5 drops of dihydrotachysterol daily, and after three days, twitching ceased completely. The child was noted to be spastic, he nursed poorly, and

failed to gain weight. The diagnosis of cerebral defect was made and the patient was referred to Dr. R. Cloward of Honolulu who made the diagnosis of agenesis of the brain after an encephalogram was taken.

#### DISCUSSION

The first case was infantile tetany, judging from the response to calcium and vitamin D administration in sufficient quantity. In this type of tetany the serum calcium and phosphorus levels are low and are amenable to calcium and vitamin D therapy.

The second and third cases were hypoparathyroid tetany. In this type the serum phosphorus level is increased while that of calcium is reduced. The second case did not respond to calcium alone but responded to parathyroid extract, which not only increases the absorption of calcium from the intestine but also the phosphorus excretion in the urine, which seems to be essential in the treatment of parathyroid tetany<sup>5</sup>.

In the second case twitchings and convulsions continued when the Sulkowitch test became negative after it was once positive, while in the third case the symptoms of tetany subsided in spite of a negative Sulkowitch reaction after a positive reaction. This can probably be explained by the fact that in the second case the calcium level was much lower than in the third case due to the mother's thyroid condition, and that the Sulkowitch test is only a qualitative measure of the serum calcium level. Furthermore, the third case was turned into latent tetany—one without manifest symptoms—until the parathyroid glands resumed their normal function.

The fourth case illustrates the similarity between convulsions of tetanogenic and of non-tetanogenic origin in the newborn. Convulsion was due to congenital cerebral defect, hence the response to both calcium and parathyroid extract was poor. In spite of positive Sulkowitch tests for several days, convulsions and twitchings persisted. Dihydrotachysterol seemed to have given some benefit. It is possible that this infant had tetany as well as agenesis of the brain. When the tetanic symptoms persist after the Sulkowitch test shows normal amount of precipitate, causes other than hypocalcemic tetany must be considered.

This case raised the question whether or not calcium is normally excreted in the urine of all apparently normal newborn infants. To answer this, urine of 40 male infants was tested with Sulkowitch reagent during their stay in the nursery of the Hilo Memorial Hospital. Males were used ex-

<sup>5</sup> Shannon, W. R.: Tetany Syndrome in New-Born Infants, *Am. J. Dis. Child.* 56: 1046, (Nov.) 1938. Pincus.<sup>6</sup>

<sup>6</sup> Pincus, J. B. and Gittleman, I. F.: Infantile Tetany, *Am. J. Dis. Child.* 51: 816, (Apr.) 1936.



clusively because of ease in collecting the specimens. The following results were obtained: On the first day after birth 53% gave positive reaction; on the second day 28% were positive; on the third day 9% were positive; on the fourth day 17%; on the fifth day 7%; on the sixth day 8%; on the seventh day 22%; on the eighth, ninth and tenth days none were positive. The number of cases in this series is too small to permit any final conclusion, but they show a trend toward gradual diminution of calcium excreted in the urine during the first few days of the neonatal period (see Table 1).

TABLE 1.

*Summary of the Sulkowitch Test of Urine of Newborns*

Age in Days	No. of Urines Tested	No. Positive	Per Cent Positive
1.....	15	8	53.3
2.....	32	9	28.1
3.....	33	3	9.09
4.....	18	3	16.6
5.....	15	1	6.6
6.....	13	1	7.7
7.....	9	2	22.0
8.....	6	0	0.0
9.....	9	0	0.0
10.....	2	0	0.0

Bakwin<sup>7</sup> examined the blood of newborns and observed that there was a steady drop in the calcium level up to the fifth day after birth and a gradual rise thereafter but not to the original level, while that of phosphorus rose gradually. He explained that these changes were caused by a temporary hypoparathyroid state in the infant due to maternal hyperparathyroidism which is a normal accompaniment of pregnancy. The lowest mean serum calcium value in Bakwin's series was 9.76 mgm. per 100 cc. This is above the renal threshold in a normal person. The coincidental elevation of serum phosphorus level seems the most likely cause for the absence of calcium in the urine during the early days of neonatal period. Bakwin states that "the mechanism by which phosphate [ingestion—Ed.] leads to hypocalcemia is not clear."

Our survey could not be continued to ascertain when the calcium normally reappears in the urine, since all babies were discharged before the infants' parathyroid glands assumed their normal function. However, in a few cases observed in my office calcium was present in the urine of 10, 11, 16 and 20 day old babies, and in almost all by 1 month of age.

Linder and Latsky<sup>8</sup>, who made a nutrition survey in 114 children between the ages of 9 and 15 years, found that if several cups of water were

given to children with a "thick" precipitate the urine subsequently would be "clear." On the other hand, the giving of milk caused "clear" urine to become thick. This observation was also made by Albright in the adult. He suggested that at the time of the test the diet must be free from milk, cheese and acidifying agents, since these can cause temporary increases in calcium excretion. Lindner and Latsky concluded that any test, the responses to which are so dependent upon the drinking of milk, which is a staple diet of early years of life, and upon fluid intake, has scanty application in the field of pediatrics. In newborns and infants whose diet during the first months of life consists solely of milk and water one would expect a "thick" reaction in the urine when tested with the Sulkowitch solution. A negative reaction is therefore of significance. The possible explanation for a clear urine with the Sulkowitch test in the neonatal period is the temporary hypoparathyroid state of the infant. According to my observations in the office, after the calcium excretion in the urine is resumed during the neonatal period, a normal child on adequate diet and vitamin D intake should continue to excrete calcium in the urine.

In the differential diagnosis of tetany, cerebral edema and intracranial hemorrhage must be considered. Differentiation may be difficult in some cases. As a rule the infant with tetany is normal in appearance when examined between the seizures, while one with cerebral involvement is usually more listless, lethargic, dyspneic, is in shock, and does not nurse or take the bottle well.

#### SUMMARY

1. The Sulkowitch test of urine is of value in the diagnosis and the management of hypocalcemic tetany of infants.

2. The Sulkowitch test is simple. It requires neither venipuncture nor an efficient laboratory technician. It may be done at the bedside. It may be used when there is difficulty in obtaining blood or when laboratory facilities are not available.

3. It is an indirect qualitative measure of the serum calcium level.

4. One case of infantile tetany, 2 cases of parathyroid tetany and 1 case of agenesis of the brain are presented to illustrate the value of the Sulkowitch test in the differential diagnosis and management of these conditions. The diagnosis was based upon the response to treatment.

5. In hypocalcemic tetany, the symptoms subside when the Sulkowitch test becomes positive. When symptoms persist after the urine persistently reacts positively to Sulkowitch reagents, the diagnosis of hypocalcemic tetany is untenable.

<sup>7</sup> Bakwin, H.: Pathogenesis of Tetany of the New-Born, *Am. J. Dis. Child.* 54: 1211, (Dec.) 1937.

<sup>8</sup> Linder, G. C. and Latsky, J. M.: Urinary Calcium in Nutrition Surveys; Sulkowitch test, *Lancet* 1: 105, (Jan. 24) 1942.



# EXTRA-UTERINE ABDOMINAL PREGNANCY REVIEW AND CASE REPORT

HOMER R. BENSON, M.D.

HONOLULU

Extra-uterine pregnancies have no doubt occurred since the beginning of human history, but were not generally recognized before the nineteenth century. The abdominal pregnancy, one of the rarest types of extra-uterine pregnancies, is of historical interest because it was the first of the ectopic gestations to be seen, recognized, and operated upon. If the extra-uterine fetus did not go to term, so that it was easily recognized and removed, it degenerated or mummified or was converted into a lithopedion. Occasionally it became infected and formed an intra-abdominal abscess which either caused death from peritonitis or, much to the consternation of the early physician, ruptured through the abdominal wall, vagina or rectum, discharging fetal bones. Although laparotomy for the removal of these fetuses and lithopedions dates back to the sixteenth century, it was not until 1759 that the first such case was recorded in America.

An abdominal pregnancy may be primary, the ovum being fertilized in the abdominal cavity and attaching itself to the peritoneum or abdominal viscera. However, it is usually considered to be secondary, resulting from an implantation in the abdominal cavity after rupture from the tube or tubal abortion. Ovarian pregnancies or tubal pregnancies attached to the tubo-ovarian fimbriae are classified among the abdominal pregnancies, and may grow to considerable size in the abdominal cavity.

The clinical picture of abdominal pregnancy is very similar to that of tubal pregnancy. The first month of pregnancy is usually uneventful, but pain is usually experienced with varying intensity by the second or third month. It is very rare for an abdominal pregnancy of any type to go on to term. If it does it can be recognized by the fact that the fetal parts and heart beat are more easily perceptible, there being no enclosing uterine wall.

Several diagnostic criteria in the x-ray studies of abdominal pregnancy are also helpful. In soft tissue studies of the abdomen one will note the absence of the uterine shadow. However, if a fairly certain diagnosis has been established, a roentgenogram of the abdomen may be made with relative safety after the injection of an opaque

medium into the uterine cavity. This will show the fetal parts to be outside the uterine shadow. The fetus usually lies high in the abdomen and invariably assumes an abnormal position. In a series of daily roentgenograms the fetus will frequently show a much greater arc of movement, and more marked changes in position, than in a uterine pregnancy. A lateral roentgenogram will show the fetal parts just beneath the abdominal wall.

Laparotomy is indicated in every case where a diagnosis is made, but it is rarely possible to deliver a viable fetus. The operation is dangerous, in that the placenta may be attached to the bowel, the bladder, or the posterior or pelvic peritoneum overlying large blood vessels. An attempt to remove the placenta from any of these structures will undoubtedly get the operator into serious difficulty. If the placenta is attached to the fundus or broad ligament, or so otherwise situated that it can be removed with safety, as much of it should be taken out as possible. Otherwise the cord should be tied off and the placenta left in the peritoneal cavity to be absorbed. Some workers have suggested the use of male sex hormone (testosterone) to facilitate the absorption, but as yet this is still in an experimental stage.

## CASE REPORT

Mrs. H., a Filipino woman, age 34, was first examined on November 21, 1944. She complained of severe abdominal pains of one month's duration and the development of a small mass in her abdomen. Her menstrual periods had been regular until three months previously, when they had suddenly ceased. The pain began in her left lower quadrant and was intermittent and stabbing in nature. At the same time she began to notice a small mass in her lower abdomen just above her bladder.

Her past medical history was uneventful except for the fact that she had had five normal children prior to 1936, when she had an appendectomy and sterilization.

Physical examination revealed nothing abnormal except for a tender mass in the lower abdomen. Pelvic examination revealed some cyanosis of the mucous membrane of the vagina and cervix. There was a large, tender mass extending up into the lower abdomen, that was about the size of a three months pregnant uterus, but the posterior portion of this mass seemed softer than a normal pregnant uterus.

The Friedman test was positive. Hemoglobin was 12.0 grams; red blood count 3,740,000; white blood count 15,450 with 87 per cent polys and 13 per cent small lymphocytes. There was a moderate shift to the left. Urine: specific gravity 1.030, slight trace of albumin; no sugar; microscopic examination negative.

Considering her past history, it was felt that this mass was an ovarian cyst lying back of the uterus, but the possibility of pregnancy was strongly considered. Laparotomy was recommended, and the patient was admitted to the hospital on December 4, 1944.

Under cyclopropane anesthesia the abdomen was opened through a midline incision. The uterus was found to be enlarged to about the size of a three and one-half months' pregnancy. The large bowel and omentum were plastered against the top and left side of the uterus. There were numerous small blood clots scattered through the inflammatory mass of bowel and omentum which also incarcerated the left tube and ovary. The bowel and omentum were carefully separated from the fundus, and in back of the fundus a large hematocele was found which ruptured as soon as it was touched. Also posterior to the uterus was a small fetus, lying in the amniotic sac.

The amniotic sac was ruptured, the cord tied off as close to the placenta as possible and the fetus removed. The placenta was attached to the posterior peritoneal wall, surrounding bowel and posterior uterus. As much of the placenta as could be easily and safely separated was clamped off and removed. Bleeding was stopped as well as possible with ties and hot packs. After all bleeding had apparently ceased, 0.5 gms. of sulfanilamide powder was dusted in the abdominal cavity and the wound closed. The patient led a normal post-operative course with no evidence of any intra-abdominal hemorrhage from placental remnants. She was discharged from the hospital on the tenth post-operative day.

The pathological specimen consisted of a male fetus 8 cm. in length, together with a placenta 7 cm. in diameter and 2 cm. in thickness, and umbilical cord. The apparent age of the fetus was three and one-half months.

At surgery, because of the amount of enlargement of the uterus, it was felt that a twin pregnancy might have been implanted in the uterus. However, pelvic examinations six weeks later showed uterus to have involuted to normal size.

#### SUMMARY

Extra-uterine abdominal pregnancy is one of the rarest types of ectopic pregnancy. It usually occurs after rupture from the tube or tubal abortion. The early clinical picture is very similar to that of a tubal pregnancy, but if it should go on towards term it can be diagnosed by abdominal examination and x-ray studies.

It is extremely rare that an abdominal pregnancy of any type will go on to term and a normal, viable baby be delivered.

The recommended treatment after a diagnosis is established is laparotomy.

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### [EDITORIALS]

#### GERMAN MEASLES IN PREGNANCY

Gregg, in Australia<sup>1</sup>, in 1941, first mentioned congenital cataract following German measles occurring during pregnancy. Of 78 infants reported as having congenital cataract, 68 had mothers who had had rubella in early pregnancy. C. H. Perera<sup>2</sup> in 1945 drew attention to the occurrence of congenital cataract and other congenital defects in children born of mothers who had had rubella during the first three months of pregnancy. Carruthers<sup>3</sup> describes the results of a survey of congenital defects made by the New South Wales Department of Public Health. One hundred forty-seven instances of congenital defect were reported; in 102 of these there was a history of maternal rubella during the pregnancy. Deafness occurred in 74 cases. Damage to the fetus was decidedly rare if the rubella occurred after the third month of pregnancy. If it occurs during the first six weeks, damage is widespread, and may involve the eyes, ears, heart and other structures. After the sixth week the eyes usually escape. The auricular cochlea may be damaged, and growth retarded.

Albaugh<sup>4</sup> concludes that *all* mothers who contract rubella during the first two months of pregnancy, and about *half* of those who develop it in the third month, will give birth to infants with congenital anomalies. Nearly all such infants are poorly developed and present feeding problems.

On the other hand, Fox and Bortin<sup>5</sup> surveyed 22,000 cases of rubella, of which 11 occurred early in pregnancy without adversely affecting the offspring; they concluded that termination of pregnancy because of occurrence of rubella in the first trimester was not justifiable.

Why has this question never been raised before? Long and Danielson<sup>6</sup>, reporting six instances of congenital defects apparently caused by rubella, postulate a new strain of rubella virus, introduced into the United States from Australia. They believe the gravity and likelihood of occurrence of these defects warrant therapeutic abortion if rubella occurs during the first third of pregnancy.

Burnet, in his book *Virus as Organism*<sup>7</sup>, states that—although rubella is not a “reportable” disease in any Australian state—it is believed on good evidence that rubella did not occur in Australia, at least in significant numbers, prior to 1937. From that year till 1942, and presumably since, it has been widely prevalent, and though most cases were mild, many have been more severe than the traditional case of German measles.

These congenital malformations may represent a newly acquired capacity of the virus, or they may reflect the unusual opportunity presented to the virus by the existence of so large a susceptible young adult population. The discovery of similar cases in the United States seems to favor the first alternative.

<sup>1</sup> Gregg, N. McA.: Congenital cataract following German measles in the mother, *Trans. Ophth. Soc. Australia* 3: 35, 1941.

<sup>2</sup> Perera, C. A.: Congenital cataract following rubella in mother; report of case, *Am. J. Ophth.* 28: 186, (Feb.) 1945.

<sup>3</sup> Carruthers, D. G.: Congenital deaf-mutism as a sequela of a rubella-like maternal infection during pregnancy, *M. J. Australia* 1: 315, (Mar. 31) 1945.

<sup>4</sup> Albaugh, C. H.: Congenital anomalies following maternal rubella, *J.A.M.A.* 129: 719, (Nov. 10) 1945.

<sup>5</sup> Fox, M. J. and Bortin, M. M.: Rubella in pregnancy, *J.A.M.A.* 130: 568, (Mar. 2) 1946.

<sup>6</sup> Long, J. C. and Danielson, R. W.: Cataract and other congenital defects in infants following rubella in the mother, *Arch. Ophth.* 34: 24, (July) 1945.

<sup>7</sup> Burnet, F. M.: *Virus as organism*, Harvard University Monograph in Medicine and Public Health, No. 8, 1944.

Because of Hawaii's location and our recent outbreak of German measles, both locally and among recently immigrated Filipino laborers, the Bureau of Maternal and Child Health, Communicable Diseases, and Vital Statistics are cooperating in a study of all the virus diseases, and especially rubella, occurring in married women who may have been pregnant at the onset of the disease.

*All physicians are urged to cooperate by reporting all such possible cases to the Board of Health. A report of the follow-up will be sent to the physician at a later date.*

J. R. E.

### WHO'S AFRAID OF THE BIG, BAD Rh FACTOR?

A little learning is a dangerous thing, and a little information about the Rh factor may be no exception to this rule. It has led, for example, to such absurd lengths as a doctor's advising an Rh negative woman, with an Rh positive husband, not to attempt to have another child—lest, forsooth, erythroblastosis fetalis be produced in the offspring. It has even been used as an excuse for the performance of a therapeutic abortion. It has created some degree of alarm among people at large, giving them a vague feeling that a new disease is abroad in the community, threatening the lives of the newborn.

This is all unnecessary; there is no cause for alarm; and Rh negative mothers need not lose any sleep over the thought that their husbands are Rh positive, if that should happen to be the case.

In the first place, only about one Caucasian individual in seven is Rh negative. On the average, only one in eight is Rh negative and wedded to an Rh positive spouse. Of such matings, perhaps half the offspring will be Rh positive: thus, one such mother in sixteen may be Rh negative, and carrying an Rh positive fetus. Of such mothers, only about one in 50 is readily sensitized: thus the chances of development of erythroblastosis are reduced to 16x50, or one in 800. Such sensitization will almost never cause trouble with the first pregnancy, and frequently not even with the second, but only with the third and succeeding gestations. On the average, let us say that this reduces the risk for a given pregnancy by one-half: then the average risk for any given pregnancy is one chance in about 1,600, in Caucasians. In Orientals it is infinitesimally small. Sixteen hundred to one is pretty favorable odds under any circumstances; it seems to us good enough to warrant a lot less worry about the Rh factor than it's been getting.

### BEEF TAPEWORM IN FILIPINOS

A review of 126 cases of *Tenia saginata* (beef tapeworm) infestation found at The Queen's Hospital for the years 1942-45 inclusive, showed the following racial distribution:

	Males	Females	Totals
Filipino .....	94	16	110
Caucasian .....	4	2	6
Japanese .....	2	0	2
Chinese .....	2	0	2
Hawaiian .....	2	0	2
Part Hawaiian .....	1	1	2
Portuguese .....	1	0	1
Syrian .....	0	1	1
Totals.....	106	20	126

It was interesting to note that only one case of *Tenia solium* infestation was found (in a Caucasian) during the same period.

It seems, at least superficially, there is something lacking in the educational program of the Filipinos regarding the use of raw or undercooked beef in their diet. The preponderance of males is probably due to the preponderance of males in the Filipino group in the islands. It might be advisable to have stool examination for parasites on all Filipinos as a routine procedure on admission to the hospital.

A. S. PRICE, M.D.

### PROMIN DOESN'T CURE LEPROSY

Promin appears to be effective against *Mycobacterium leprae*, and to control lepromatous leprosy and even induce it to regress, but it does not cure the disease. This is the conclusion reached at Carville after four years of experience with the drug, according to a recent publication by George Fite and F. Gemar<sup>1</sup>.

Thirty-two lepromatous cases were studied histologically and treated with Promin for from one and one-half to four years. Every case regressed clinically and histologically under treatment. Ten became entirely free of demonstrable bacilli. Only 3 remained heavily positive, and in these the small globi and bundles of bacilli characteristic of active or progressing cases became very scarce.

Two thousand "snips" made on 100 Promin-treated cases showed a steady drop in the degree of positiveness over the four-year period, *most marked between the third and fourth years*. No acute lepra reactions occurred under Promin therapy, and no new lesions developed.

<sup>1</sup> Fite, G. L., and Gemar, F.: Regressive Changes in Leprosy under Promin Therapy, Southern Med. J. 39: 277, (April) 1946.

Fite and Gemar arrive at this final conservative conclusion: Promin seems an effective bacteriostatic agent but a poor or ineffective bacteriolytic one, in leprosy.

Effective chemotherapy for leprosy may be just around the corner, but it isn't here yet. We still have to depend on the reticulo-endothelial system!

#### LABORATORY TECHNICIANS

Doctors or hospitals in need of laboratory technicians may make application to Miss Marguerite Beatty, Board of Health Bacteriological Laboratory, Honolulu, Phone 54921 Local 321.

#### IMMUNIZATION REQUIREMENTS

At the present time, naval and civilian personnel traveling under the cognizance of the United States Navy Department outside the United States are required to have certain immunizations. All areas require at least smallpox, typhoid and tetanus immunization within the past year. Certain other areas require further immunizations. The following list of requirements has been taken from the revised requirements as of May, 1945 (NAVMED 323). This check list is not final. It will be necessary to comply with local requirements.

Destination	SMALLPOX	TYPHOID	TETANUS	YELLOW FEVER	TYPHUS	CHOLERA	PLAGUE
	Within the past year	Within the past year	Within the past year	Within the past 4 years	Within the past 6 mos.	Within the past 6 mos.	Within the past 4 mos.
West Indies .....	(1)	(1)	(1)	(3)	(3)	(3)	(3)
Mexico and Guatemala .....	(1)	(1)	(1)	(3)	(1)	(3)	(3)
Venezuela, Colombia, Ecuador, and Peru .....	(1)	(1)	(1)	(4)	(1)	(3)	(2)
Remainder of South America .....	(1)	(1)	(1)	(4)	(3)	(3)	(2)
Africa and Madagascar .....	(1) (7)	(1)	(1)	(5)	(1)	(3)	(2)
Eire, Southern Europe, the Balkans, and European U.S.S.R. ....	(1)	(1)	(1)	(3)	(1)	(3)	(3)
Asia Minor and the Middle East .....	(1) (7)	(1)	(1)	(3)	(1)	(3)	(2)
India and Eastern Asia .....	(1) (7)	(1)	(1)	(6)	(1)	(1)	(2)
Southeast Asia .....	(1) (7)	(1)	(1)	(3)	(1)	(1)	(2)
Philippines .....	(1)	(1)	(1)	(3)	(3)	(1)	(3)
Sumatra and Java .....	(1)	(1)	(1)	(3)	(3)	(1)	(2)
Celebes .....	(1)	(1)	(1)	(3)	(3)	(1)	(2)
New Guinea and Borneo .....	(1)	(1)	(1)	(3)	(3)	(3)	(2)
Japan and Formosa .....	(1)	(1)	(1)	(3)	(3)	(1)	(3)
Polynesia, Micronesia, and Melanesia	(1)	(1)	(1)	(3)	(3)	(3)	(3)
Australia and New Zealand .....	(1)	(1)	(1)	(3)	(3)	(3)	(3)
All other areas .....	(1)	(1)	(1)	(3)	(3)	(3)	(3)

(1) Required.

(2) Recommended for particularly exposed personnel in the presence of an epidemic only.

(3) Not required or recommended.

(4) In South America between 13° north latitude and 30° south latitude.

(5) In Africa and adjacent islands between 20° north latitude and 13° south latitude.

(6) Personnel arriving at any port of entry to India, and having passed through a yellow fever endemic area en route, will be permitted to enter India without submitting to quarantine for this disease, only provided that they present evidence of having been vaccinated against yellow fever not less than 10 days nor more than 4 years previous to entering the yellow fever endemic area.

(7) Immunization within the past 6 months is required in these areas.

J. R. E.



# NOTES AND NEWS

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## PERSONALS

Recently discharged from the service and entering private practice in Honolulu are DR. EDWIN K. CHUNG-HOON, who is associated with DR. H. S. DICKSON, limiting his practice to dermatology and internal medicine; DR. DAVID L. PANG, who is located with DR. FRED LAM; DR. F. H. TONG, who is practicing with DR. RAYMOND KONG; DR. JOSEPH F. C. LAU, who limits his practice to eye, ear, nose and throat; DR. ROBERT T. WONG, who specializes in ophthalmology; and DR. KWAN HEEN HO, who has joined the Chang Clinic as a general surgeon.

Others who have opened offices in Honolulu are DR. RICHARD A. HERRON and DR. BENJAMIN M. HIGASHI.

A daughter, Carol Lynn, their fourth, was added to the family of DR. AND MRS. WILLIAM PATTERSON, of Puunene, Maui, on April 21.

DR. AND MRS. SAMUEL YEE, of Honolulu, are parents of a son, Ronald W. K., their second child, born in The Queen's Hospital, on April 12.

A second child, Constance Susanne, was presented to DR. AND MRS. OGDEN D. PINKERTON, of Honolulu, on May 23, at Wahiawa General Hospital. Dr. Pinkerton is on the coast for a short time while taking the examinations in the American Board of Ophthalmology.

DR. HERBERT ROTHWELL returned July 1 to Kahuku, after six months of graduate study in the East. DR. ALVIN DOUGAN, who has been associated with him, leaves July 12 for a prolonged trip on the Mainland.

The Wahiawa General Hospital Staff, under the presidency of DR. MAURICE DEHARNE, has commenced fortnightly luncheon staff meetings of an educational nature. Speakers have been DR. S. MIYASAKI, of Waialua, who talked on atypical pneumonias and DR. SAM I. TASHIMA, of Wahiawa, who spoke on Rh factor and transfusions.

The Children's Hospital, Honolulu, has recently been fully accredited by the American College of Surgeons. At a recent meeting DR. JOSEPH PALMA was elected president of the active staff.

DR. NILS P. LARSEN, of Honolulu, has been awarded an honorary degree of Doctor of Science by his alma mater, Massachusetts State College, for his distinguished contributions to public health in Hawaii.

DR. L. CLAGETT BECK has returned from government service in the Virgin Islands to resume his practice of internal medicine with The Clinic, Honolulu.

Recently discharged as a Lieutenant Colonel from the Army, DR. EDMUND ING has re-opened his offices in Honolulu, specializing in urology.

LIEUTENANT COLONEL ISAAC KAWASAKI, who was wounded in action in Italy while serving with the 100th Infantry Battalion, is acting as pathologist at St. Francis Hospital, Honolulu, prior to his discharge from the Army.

DR. I. L. TILDEN has returned to The Clinic, Honolulu, after successfully completing his examinations in the American Board of Pathology.

DR. JOHN W. COOPER will resume his orthopedic practice in Honolulu August 1, having been in California for six months in graduate study.

DR. JOE T. LUCAS, JR. has now joined DR. GARTON E. WALL on the staff of the Ewa Hospital, following his discharge from the Navy, part of his term of duty being served in the Islands.

Local physicians appearing on the program of the American Medical Association in San Francisco in July are: DR. HAROLD M. JOHNSON, discussing a paper on Toxic Reactions Accompanying Penicillin; DR. HARRY L. ARNOLD, JR., discussing Cutaneous Manifestations of Monocytic Leukemia; and DR. STEELE STEWART, who discusses a paper on Farm Injuries. Others known to be attending the meeting are DR. F. J. HALFORD, delegate from the Hawaii Territorial Medical Association; DR. LYLE G. PHILLIPS and DR. RALPH W. CLOWARD.

Leaving for Mainland visits recently were DRs. W. K. CHANG, G. M. VAN POOLE, WALTER F. MACKLIN, H. E. BOWLES, all of Honolulu, and DR. FRANK ST. SURE, JR., of Paia, Maui.

DR. LOUISE S. CHILDS, of Honolulu, is on the Mainland taking the examinations of the American Board of Pediatrics.

DR. DOUGLAS H. MURRAY, who served four years in Hawaii in the Army during the war, has become associated with DR. LYLE G. PHILLIPS, in Honolulu.

LIEUTENANT COMMANDER ROGERS L. HILL (M.C.), USNR, was welcomed back to the Islands in June, after a tour of duty in the Philippines. He is awaiting his discharge from the Navy before returning to private practice.

DR. JOHN L. BELL is practicing internal medicine in association with his brother, DR. DOUGLAS B. BELL, in Honolulu. The former served in the Army in the Pacific Theatre prior to his discharge.

DR. VIRGIL O. HARL, formerly of Kauai, has returned to the Islands, being located temporarily with the Wailuku Sugar Co., Maui, while DR. WILLIAM D. BALFOUR is taking a three months' vacation on the Mainland.

DR. NATHANIEL BENYAS is on the Coast, having been obliged to discontinue his practice due to ill-health.

A distinguished visitor in May was DR. SVEN H. LILJESTRAND, father of DR. HOWARD LILJESTRAND, of Aiea. He stopped over on his return to the West China Union University at Chengtu, where he has practiced and taught for many years.

DR. JESSE W. SMITH, of Honolulu, is taking an extended trip, which includes Mexico and Canada, as well as Mainland medical centers.

DR. ARTHUR V. MOLYNEUX has resumed practice at The Medical Group, Honolulu, after six months' graduate study in New York and Philadelphia.

CAPTAIN FERRIS W. THOMPSON (M.C.), USNR, formerly of Aiea, is now practicing in Pasadena.

DR. E. R. AUSTIN and DR. C. M. BURGESS of The Clinic went to the Mainland to take American Board examinations, the former in Otolaryngology and the latter in Surgery.

#### Kauai News

DR. AND MRS. SAM WALLIS are the proud parents of an eight-pound baby girl named Mary Margaret, who was born on June 19 at the Wilcox Hospital, Lihue. Dr. and Mrs. Wallis contemplate a trip to the coast at the end of July. They will fly to the coast on the Pan American Clipper and will be away for one month. In the absence of Dr. Wallis, DR. PATRICK M. COCKETT, ably assisted by DR. WILLIAM TONEY, will carry on.

DR. WILLIAM TONEY, recently appointed physician for the Kilauea Plantation Company in place of Dr. Homer Harris, resigned, will soon become a full fledged member of the Kauai Medical Society. He recently passed his territorial medical examinations in Honolulu.

The following Kauai doctors were separated from the armed services following termination of World War II:

DR. BURT O. WADE, plantation physician for the Kekaha and Waimea and Olokele Sugar Com-

panies after over four years of service in the U. S. Navy. He received his honorable discharge as a Captain. He saw action as a member of Admiral Halsey's staff in the Solomon Islands, Marshall Islands, Caroline Islands, and the Philippine Islands.

DR. WILLIAM TONEY was honorably discharged with the rank of Major after over four years of service at the Tripler General Hospital in Honolulu where he was administrative officer.

DR. PATRICK COCKETT was honorably discharged with the rank of Major after over four years of service. He saw action in the Solomon Islands, New Guinea, and Luzon, Philippines as a regimental surgeon for the 103rd Infantry, 43rd Division.

DR. DONALD DEPP was honorably discharged after active service with the 24th Division in New Guinea, and Leyte, Philippines. He held the rank of Major.

#### Hawaii News

DR. AND MRS. WALTER T. SEYMOUR of Kona are the proud parents of a fourth child, and incidentally their fourth boy. Dr. Seymour is President of the Hawaii County Medical Society.

DR. E. F. SLATEN, formerly of Waipahu, Oahu, is now physician for the Hawaiian Agricultural Company and head physician at the Pahala Hospital.

DR. AND MRS. H. M. PATTERSON of Olaa are the parents of a second son, their third child, born on March 12, 1946. The entire Patterson family is sailing on the Matsonia July 26 for a 7 months' trip on the Mainland. Dr. Patterson plans to visit all the principal obstetric and gynecological centers in the United States while on this trip. DR. RODNEY T. WEST, formerly of Honolulu who was discharged from the Navy in January 1946 and who has been with The Clinic for the past 6 months, arrived at Olaa on July 8, 1946 to carry on the work there during Dr. Patterson's absence. Dr. West and Dr. Patterson will be associates upon the latter's return from the Mainland.

DR. AND MRS. S. R. BROWN of Hilo left July 12, 1946 for several months' visit to the United States and Canada. DR. SCOTT STRATHAIRN, a native son of Hilo, is now in practice in Hilo with DR. S. R. BROWN and C. B. BROWN.

DR. ARCHIE ORENSTEIN of Hilo spent the week of July 7-14 in Kona.

DR. THOMAS KEAY, former physician in charge of the Pepeekeo Hospital, was a visitor to the Island of Hawaii during the first week of July. Dr. Keay was the guest of honor of the Associa-



tion of Hawaii County Plantation Physicians at a dinner at the Hilo Hotel on July 8th. This dinner was, in fact, a testimonial dinner for Dr. Keay who was a leader in the field of plantation medicine as well as Territorial medicine for 23 years. Dr. Keay is a former President of the Territorial Medical Association.

DR. WIPPERMAN, former physician for the Hakalau Sugar Company, has returned to Hilo where he is limiting his practice to obstetrics and gynecology after spending 1½ years in post-graduate training in this field at the University of California and at Emory University.

DR. A. T. ROLL, who has practiced in Hilo for over 25 years, has retired from practice and has gone to Kentucky to make his future home.

DR. LEABERT FERNANDEZ of Laupahoehoe was married on July 13, 1946. His bride was Miss Marsue McGinnis.

DR. IVAR LARSEN, who was physician for the Kohala Sugar Company for nearly 5 years, has returned to New York City where he will specialize in orthopedics by completing a residency at the Hospital for Special Services. DR. BARTON EVELETH and DR. R. S. FILLMORE, both formerly of Ewa, Oahu, are now the physicians for the Kohala Sugar Company.

DR. H. M. PATTERSON of Olaa has been elected a Fellow of the American Association of Industrial Physicians and Surgeons, the first physician in the Territory of Hawaii to be so honored. This recognition is given to selected physicians who have been members of the Association for 5 years and who have done outstanding work in the field of Industrial Medicine and Surgery.

#### Health Department News

DR. SAMUEL M. WISHIK, director of the maternal and child health and crippled children's bureau of the Board of Health, left for the Philippine Islands early in May to be a maternal and child health consultant to the commonwealth government. Dr. Wishik was sent by the U. S. Children's Bureau and the State Department to assist the department of health and public welfare of the Philippine government in planning a two-year maternal and child health program. After spending three months there, he will return to the Territory and then leave for New York to become chief of the Division for Physically Handicapped Children of the New York city health department.

DR. JANET M. BOOG arrived from the mainland recently to join the health department as consultant physician in maternal health. Dr. Boog is a specialist in obstetrics and gynecology having re-

ceived her training in those fields at the University of Michigan College of Medicine. She received her M.D. degree from New York Medical College.

After attending the meeting of the State and Territorial and Health Officers Association in Washington, D. C., on April 8, 9, 10 and 11, DR. CHARLES L. WILBAR, JR., president of the board of health, returned to Honolulu on May 7. DR. LEO BERNSTEIN, county health officer of Hawaii, returned at the same time after having spent a terminal leave from the U. S. Public Health Service on the mainland.

MISS HATTIE SCHMALZ and MISS RUTH L. RYDEN, public health nurses, joined the board of health nursing staff in May. Miss Schmalz has been a public health nurse in Pierre, South Dakota, for the past four and a half years. Miss Ryden served as a first lieutenant in the army nurse corps for eighteen months at the Mayo General Hospital in Galesburg, Illinois. Previous to joining the army she was a public health nurse with the Los Angeles county health department, the state health department of New Mexico and the Los Angeles county schools.

FREDERICK SCHRAMM, assistant director of the bureau of sanitation of the board of health, was elected president of the Hawaii Public Health Association at the second annual meeting of the organization on April 30. Other officers elected were MISS VIRGINIA JONES of the University of Hawaii nursing school, vice president; MRS. DOROTHY FANTASIA, secretary; and MISS SARAH KLEIN-SCHMIDT, medical social work consultant at the board of health, treasurer.

#### BOOK REVIEWS

*Operations of General Surgery* by Thomas G. Orr, Professor of Surgery, University of Kansas. Price \$10.00. Pp. 723, with 1,396 illustrations. Philadelphia. W. B. Saunders Company. 1944.

This book is enjoying a tremendous popularity on the Mainland and is being reviewed at this time to call attention to its value to any one doing any type of general surgery.

Dr. Orr has succeeded in placing in one volume more worthwhile and usable material than is frequently found in three volume sets or even larger systems. Under each organ or system is described a satisfactory method of carrying out a good surgical procedure for a given condition or disease, which method and technique have worked. There is little to confuse one by describing multitudinous techniques for the same procedure.

The chapters on general surgical principles are excellent and, if studied, will more than amply repay the reader for his time.



This book is most enthusiastically recommended to any physician with surgical interests and should be of special value to plantation and returning service physicians as well as to the established operator, who wishes a compact, easily readable, beautifully illustrated, surgical technique book.

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**A Manual of Surgical Anatomy** by Tom Jones and W. C. Shepard. Cloth. Price \$5.00. Pp. 195. Philadelphia, W. B. Saunders Company. 1945.

As a companion book to the above to have readily available for rapid refreshing on surgical anatomy, this volume can not be excelled. It was designed for the medical officer, as the last of the Military Surgical Manuals, but arrived from the printer too late to serve this purpose extensively. However, as a manual for the civilian surgeon, particularly traumatic, it offers a wealth of anatomical fact such as can not be found in any similar work. The price is deceptive as to its value, since, if published as a non-military volume it could easily have sold for two or three times its list price.

It is the opinion of the reviewer that this manual should be in the hands of everyone doing traumatic surgery, preferably very handy where it can be consulted frequently, as in the doctor's dressing room or in the emergency room. Anatomy, at best, can not be completely retained by most of us and to be able to refresh our knowledge from Tom Jones and W. C. Shepard's skill and clarity of presentation is an opportunity which should not be neglected, now that this book is available.

### MEDICAL LEGISLATION

Current reports from Washington, D. C., indicate that the Wagner-Murray-Dingell bill S.1606 is showing less chance of passing than at any time since its introduction. With the numerous and more pressing problems which Congress has to face, it is in no mood to appropriate the large sums of money necessary to carry out the provisions of the bill, either now or in the foreseeable future.

Just what course the National Health Act of 1946, a bill introduced by Senator Robert A. Taft as an alternative to the W-M-D bill, will take, is uncertain at this time. It provides for medical service for persons in the low-income groups, amongst other things, in a more conservative and practical manner than provided for in the W-D-M bill.

### BIOLOGICAL PHOTOGRAPHIC ASSOCIATION

The Biological Photographic Association will hold its sixteenth annual meeting at the Hotel La Salle in Chicago, September 5, 6 and 7. Experts in the fields of biological and clinical photography will give illustrated talks on new developments in methods and equipment. Techniques of still and motion-picture photography, copy, and photomicrography, will be discussed. Informal discussions will be held for the purpose of exchanging ideas and information. The work of many of the leading biological photographers will be on display in the Salon, and new materials and equipment will be shown in the Technical Exhibit.

The Biological Photographic Association, a non-profit organization, was formed in 1931 to raise the standards of photography in teaching and research, and to act as a clearing house for information on photographic methods. Its members are professional scientific photographers; scientists with an interest in photography as applied to their fields; and designers of precision equipment. The Association's Journal is published quarterly, constituting a volume of about 250 pages, which is furnished free to members. Membership privileges include an authoritative question-and-answer service; also the right to borrow loan-albums and exhibits of scientific prints for study and display. Further information about the Association may be obtained by writing the Secretary of the Biological Photographic Association, University Office, Magee Hospital, Pittsburgh 13, Pa.

### CALLING ATTENTION TO

Items of possible interest to friends of  
Chauncey D. Leake

JUNE, 1946

1. GENERAL: C. G. Hartman makes pertinent plea for support of the little researcher. (*Science* 103: 493, Apr. 26/46.) Cambridge Univ. Press offers H. Burrows' *Biological Actions of Sex Hormones* (Cambridge, '46, \$8.50). E. Hesse writes *Narcotics and Drug Addiction* (Philosophical Library, 15 E. 40th, N. Y. 16, '46, \$3.75.) M. J. D. White reviews *Animal Cytology and Evolution* (Macmillan, 60 5th Ave., N. Y. 11, 375 pp., '46, \$7.50). Artistic report on U. S. Army medicine is compiled by D. Mackenzie (Blakiston, Phila., 470 pp., '46, entitled *Men Without Arms*, \$5.00). L. Whitby also claims that scientists are artists (*The Science and Art of Medicine*, Macmillan, N. Y. 11, '46, \$0.50). A. B. Hastings and M. B. Shimkin report on medical research mission to Soviet Union (*Science*, 103: 605, May 17/46). S. Epstein and B. Williams rhapsodize on *Miracles from Microbes: The Road to Streptomycin* (Rutgers Univ. Press, New Brunswick, N. J., '46, \$2.00). H. E. Sigerist collects provocative essays, mostly on medical education, under

title *The University at the Crossroads* (Schuman, 20 E. 70, N. Y., '46, \$2.75). C. P. McCord writes well on maladies of workers under title *A Blind Hog's Acorns* (Cloud, Chicago, '45, 311 pp., \$3.00). S. Hook goes after M. Adler in writing sensibly on *Education for Modern Man* (Dial, N. Y., 227 pp., \$2.75, '46). For powerful poetry, note H. Hagedorn's *The Bomb That Fell on America* (Santa Barbara, Pacific Coast Publ., 57 pp., '46, \$1.25). D. Carter bravely tackles social problems in *Sin and Science* (Heck-Cattell, 33 W. 42, N. Y. 18, '46, \$2.50). B. J. Stern discusses *Medicine in Industry* (Commonwealth, N. Y., '46, 209 pp., \$1.50). J. Ortega y Gasset (Madrid) is brilliant and bewildering in *Concord and Liberty* (Norton, 70 5th, N. Y. 11, '46, \$3.00).

2. NERVOUS SYSTEM ENZYMES: F. M. Forster & Co. show similarity of acetylcholine treated sensory cortex and epileptic cortex (*J. Neuropath. and Exp. Neurol.* 5: 24/46). W. Feldberg and T. Mann find adenosine triphosphate, citric acid, and unknown dialyzable activator increase enzymic synthesis of acetylcholine in brain and nervous tissue (*J. Physiol.* 104: 411/46). F. Crescitelli & Co. show by di-isopropyl fluorophosphate that nerves can conduct in absence of cholinesterase, but Th. Bullock & Co. interpret similar experiments as showing release and removal of acetylcholine essential for conduction (*J. Neurophysiol.*, 9: 241, 253, '46). D. Nachmansohn & Co. offer much evidence for acetylcholine formation in nerve axon and show its relation to conduction (*J. Biol. Chem.* 163: 475/46).

3. PHARMACOLOGICAL NOTES: A. N. Bose & Co. find toxicity of urea stibamine and other antimonials may be reduced by removing antimonious acid (*Indian Med. Gaz.* 81: 13/46). J. E. P. Toman & Co. describe rapid method of appraising antiepileptics and find diphenyl hydantoin and phenobarbital show highest protective index, with tridione equalling phenobarbital (*J. Neurophysiol.* 9: 230/46). F. Dickens reports on toxic effects

of oxygen on brain metabolism and tissue enzymes (*Biochem. J.* 40: 145, 171, '46). B. P. Babkin & Co. (*Rev. Canad. Biol.* 5: 72/46) confirm E. Starkenstein (*Med. Klin.* 23: 1437, 1927) that scopolamine, or small doses of bulbocapnine with NaBr, help control motion sickness. W. Jacobson and D. M. Simpson offer evidence that leucopterin or related purine complexes are the effective antipernicious anemia factors (*Biochem. J.* 40: 3, 9, '46). H. C. S. Aron & Co. report that fever temperatures reduce plasma vitamin A and carotene (*Proc. Soc. Exp. Biol. Med.* 61: 271/46). C. J. D. Zarafonitis & Co. note immunity following p-amino benzoic acid therapy in scrub typhus (*Ibid* p. 240). J. M. Rogoff & Co. discuss nervous system mechanism for adrenin secretion (*Ibid* p. 251). P. De reports blood sugar levels vary directly with depth of anesthesia, depending on release of hypothalamic sympathetic center from cortical control (*Indian Med. Gaz.* 81: 17/46). Our G. R. Herrmann finds that choline helps to mobilize and metabolize cholesterol from blood and tissues (*Proc. Soc. Exp. Biol. Med.* 61: 302/46).

4. ETC.: Oleanders to B. J. Anson for skilled editing of *Quart. Bull. Northwestern Med. School*: in current issue note H. B. Bull's chemical note on elastic elements of skeletal muscle, H. W. Magoun's review of extra-pyramidal system, L. Doyle's appreciation of A. I. Kendall, E. W. Hagens' article on otosclerosis, and E. H. Vincent's note on doctors and music (20: 175, 180, 192, 215, 240, '46). J. P. Chu & Co. discuss relation between uterus and corpus luteum (*J. Endocrinol.* 4: 392/46). A. C. Bottomley exhaustively treats of logistic dose-response curves in assays measured by growth of test organ (*Ibid* p. 399). D. G. Sharp & Co. present fine shadowed electron micrographs of viruses (*Proc. Soc. Exp. Biol. Med.* 61: 259/46). G. H. Hyslop and C. E. Dunlap review effects of electrical and radiation injury (*Occup. Med.* 1: 199, 237, '46).

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Library closed all day on national holidays; after 12 noon  
on Territorial holidays

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## RECENT ACQUISITIONS

### By purchase:

Beckman, Harry. *Treatment in general practice*. 5th ed. c1945.

Mason, R. L. *Preoperative and postoperative treatment*. 2nd ed. c1946.

### From the Hospital Association:

Crile, George, Jr. *Hospital care of the surgical patient*. c1946.

Hayt, Emanuel. *Legal guide to American hospitals*. c1940.

Mills, A. B., ed. *Modern small hospital*. c1946.

Morrill, W. P. *The hospital; manual of operation*. c1934.

Sloan, R. P. *Hospital color and decoration*. c1944.

Southmayd, H. J. *Small community hospitals*. c1944.

West, B. B. *Food service in institutions*. 2nd ed. c1945.

### From the Nurses' Association:

Levinson, Abraham. *Pediatric nursing*. 3rd ed. c1945.

### From the National Foundation for Infantile Paralysis:

Fishbein, Morris, ed. *Bibliography of infantile paralysis*. c1946.

### From the U. S. Public Health Service:

U. S. Public Health Service. *National health survey*, 1935-36.

### From The Clinic:

Luck, J. M., ed. *Annual review of physiology*, v. 3-5. 1941-43.

Luck, J. M., ed. *Annual review of biochemistry*, v. 10-11. 1941-42.

*Science* (back and current files).

### From Dr. F. J. Pinkerton:

Da Costa, J. C. *Modern surgery*. 8th ed. c1919.

Falk, H. C. *Operating room procedure*. 3rd ed. c1942.

Watkyn-Thomas, F. W. *Principles and practice of otology*. c1933.

Willis, R. A. *Spread of tumors in the human body*. c1934.

### From Dr. H. H. Walker:

*Aesculape*, v. 17-25, 1927-35.

*Annals of Medical History*, v. 8-10. (1st series); v. 1-6 (2nd series).

*Hippocrate*, 1933-34.

### From Dr. F. J. Halford:

*Journal of the History of Medicine and Allied Sciences*. (Subscription.)

### From Dr. Eric A. Fennel:

*Queen's Hospital Reports*, 1910-1944.

*Transactions of the Hawaiian Territorial Medical Society*, 1908-1927.

## DR. LEAKE'S VISIT

It was most fortunate for us that Dr. Leake happened to be so interested in medical libraries, and so well qualified to offer advice. He at one time directed the library activities of the University of California Medical Center, and is a consultant of the Army Medical Library. While he was in Honolulu, a special meeting of the Library Board and the Library Committee was held, and all present agreed that the discussion of library problems was most stimulating, and Dr. Leake's suggestions for future development most helpful. Many thanks to you for your kokua, Dr. Leake!

## LIBRARY CONTRIBUTIONS

Following is a list of the names of members of the Honolulu County Medical Society who have made some contribution, whether in large or small degree, to the Library Endowment Fund. The Library Board wishes to clarify the object and purpose of this fund. It is to "maintain, operate and conduct for the welfare of the community generally a medical reference library . . . and to advance and stimulate interest in medical education by providing opportunities for research. . . ." It is also our desire to increase this fund and its invested income to a point where the future security of the Medical Library's development might be assured. At the present, it is our backlog, to be drawn upon whenever the need arises. In the future, with the many unsolved problems of library expansion to be faced, this fund may prove of inestimable value at a crucial moment.



Akita, Hajime  
 Ahana, Wm. W. L.  
 Akina, Henry C.  
 Alsup, F. F.  
 Alsup, W. E.  
 Amlin, Kenneth  
 Arnold, Harry L., Jr.  
 Arthur, Philip  
 Austin, E. R.  
 Bailey, Robert F.  
 Bell, Douglas B.  
 Benyas, Nathaniel M.  
 Benz, Rudolph W.  
 Black, Gardner  
 Bowles, Herbert E.  
 Brown, R. O.  
 Burgess, Clarence M.  
 Buzaid, Louis L.  
 Chandler, H. M.  
 Chang, Clarence F.  
 Chang, W. K.  
 Childs, Edgar S.  
 Childs, Louise  
 Chock, K. C.  
 Chung, Mon Fah  
 Chung, W. M. S.  
 Cloward, Ralph B.  
 Cooper, John W.  
 Craig, Alfred L.  
 Cushnie, Edward F.  
 Davis, Arthur L.  
 de Harne, Maurice A.  
 Devereux, John Wm.  
 Doolittle, S. E.  
 Eveleth, B. M.  
 Faus, Marie K.  
 Faus, Robert B.  
 Fennel, Eric  
 Fillmore, R. S.  
 French, William O.  
 Fronk, Clarence E.  
 Fujii, K. K.  
 Fujiwara, Thomas F.  
 Gaspar, L. A. R., Jr.  
 Gordon, Maurice  
 Halford, F. J.  
 Halpern, G. M.  
 Hartwell, Alfred S.  
 Hasegawa, Chinami  
 Hata, Tadao  
 Hill, Rogers Lee  
 Holmes, W. J.  
 Honda, Howard H.  
 Honi, L. A.  
 Hoshino, M.  
 Hosoi, Kiyoshi  
 Ing, H. Y.  
 Inouye, Kiyoshi  
 Irwin, Fred  
 Irwin, P. S.  
 Ito, William S.  
 Iwanaga, Barney  
 Johnson, Harold M.  
 Johnston, R. G.

Judd, James R.  
 Kainuma, Richard T.  
 Kam, Edwin T.  
 Kaneshiro, Francis T.  
 Kang, Y. P.  
 Katsuki, David I.  
 Katsuki, S. S.  
 Kepner, Richard D.  
 Kimura, Minoru  
 Kometani, John T.  
 Komu, Shizue H.  
 Kong, Raymond F.  
 Kuninobu, James  
 Kuramoto, Mitsuo  
 Lam, Fred  
 Lam, Joseph  
 Larsen, Nils P.  
 Lee, Edmund L.  
 Lee, Robert C. H.  
 Lee, Robert H.  
 Li, Benjamin  
 Li, M. H.  
 Lichter, Martin H.  
 Liljestrand, Paul  
 Luke, H. B.  
 McCorriston, C. C.  
 Mack, M. H.  
 Majoska, Alvin L.  
 Marshall, Donald  
 Matsuyoshi, M.  
 Matsuyama, Satoru  
 Mermod, Leon E.  
 Milnor, Guy C.  
 Minatoya, Wilfred  
 Mirikitani, I.  
 Mitchell, E. W.  
 Mitsuda, Masato  
 Miyasaki, Seiichi  
 Moffat, Harold F.  
 Mori, Iga  
 Nance, F. D.  
 Narita, M.  
 Natsui, Dorothy S.  
 Ng-Kamsat, Abraham  
 Nishigaya, Toru  
 Nishihara, Mitsuo  
 Nishijima, E.  
 Nishijima, Satoru  
 Ogawa, Raymond M.  
 Ohta, Wilfred T.  
 Ohtani, Masato  
 Okazaki, Kyuro  
 Ozawa, Walter M.  
 Pang, H. Q.  
 Pang, L. Q.  
 Phillips, Lyle G.  
 Pinkerton, F. J.  
 Pinkerton, Ogden  
 Price, Sumner  
 Putman, Frank L.  
 Richert, Thomas H.  
 Rothwell, Herbert T.  
 Sakimoto, Richard Y.  
 Sato, Zen

Saunders, Cecil A.  
 Schnack, A. G.  
 Seto, Y. S.  
 Shanahan, William M.  
 Shinkawa, T.  
 Sia, Richard H. P.  
 Slaten, E. F.  
 Sloan, Norman R.  
 Smith, Jesse W.  
 Spencer, Frank C.  
 Stevens, M. E.  
 Stewart, Steele F.  
 Strode, Joseph E.  
 Sugihara, Clarence  
 Takaki, H. S.  
 Tamura, Thomas  
 Takenaka, Kameichi  
 Taylor, Thomas L.  
 Thompson, F. W.  
 Tilden, I. L.  
 Tong, F. H.  
 Trexler, C. W.

Tyau, George  
 Uchiyama, H.  
 Uyeno, R. K.  
 Van Poole, G. M.  
 Walker, H. H.  
 Walsh, William M.  
 Wee, Timothy I.  
 Wilbar, Charles L.  
 Withington, Paul  
 Wong, Robert T.  
 Wynn, William H.  
 Yamamoto, Shigeo  
 Yamane, Richard N.  
 Yamashiro, M.  
 Yamashiro, S.  
 Yamauchi, S.  
 Yang, Y. C.  
 Yap, Raymond  
 Yee, Cyrus  
 Yee, Doris Loo  
 Yee, Samuel L.  
 You, E. W.

### Gifts have also been received from:

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 Inter-Island Steam Navigation Company  
 Hawaiian Pineapple Company  
 Mr. C. C. Pittman

If for any reason a doctor does not want to contribute to the Endowment Fund, we would welcome some other gift from him, such as a life subscription to a medical journal, or the purchase of some rare volume of interest. There are other items also which would be most useful in the Library. The important thing is that each and every physician should contribute in some way toward the progress of the Library.

# FIFTY-SIXTH ANNUAL MEETING HAWAII TERRITORIAL MEDICAL ASSOCIATION

MABEL L. SMYTH BUILDING, HONOLULU, HAWAII  
MAY 2-5, 1946

Friday, May 3, 1946, 3:00 p.m.

The fifty-sixth annual meeting of the Hawaii Territorial Medical Association was opened in the auditorium of the Mabel L. Smyth Building with a joint meeting of the House of Delegates and membership. The following program was presented:

## SCIENTIFIC PROGRAM

*Angiomatosis Retinae* by Ogden D. Pinkerton, M.D.  
*Surgical Management of Bleeding Peptic Ulcer* by Laurence M. Wiig, M.D.  
*Analysis of Queen's Diabetic Clinic* by Morton E. Berk, M.D.  
*Conditioned Reflex in Treatment of Alcoholism* by William M. Shanahan, M.D.  
*Movie, Chest Surgery* by Edmund L. Lee, M.D.  
*Circulation in Health and Disease* by Nils P. Larsen, M.D.  
*Curable Heart Disease in Adults* by Alfred S. Hartwell, M.D.  
*Increasing Resistance to Disease: The Physiological Significance of the Reticulo-Endothelial System* by Chauncey D. Leake, Ph.D.  
*The Diagnosis and Treatment of Early Conduction Deafness* by L. Q. Pang, M.D.  
*Psychiatry for the General Practitioner* by R. D. Kepner, M.D.  
*Malaria in Migrant Laborers and Returning Servicemen* by R. G. von Scorebrand, M.D.  
*Movie, Intocostrin: Its Use in Anesthesia* by courtesy of E. R. Squibb & Sons.

## MEETINGS

*Council*—Thursday evening, dinner meeting at the Pacific Club.  
*House of Delegates*—Friday afternoon, 3:00, Mabel Smyth Building.  
*House of Delegates*—Saturday luncheon, Library of The Clinic.

Other meetings held in conjunction with the annual meeting were:

*Advisory Committee to Bureau of Crippled Children*, Thursday morning, Mabel Smyth Building.  
*Advisory Committee to Maternal and Child Health Bureau*, Thursday lunch, Pacific Club.  
*Inspection of Additions to St. Francis Hospital*, with Luncheon, Thursday noon.  
*Round Table Meeting*, Saturday morning, Mabel Smyth Building:  
1. *H.M.S.A. and the Veterans Administration*.  
2. *Territorial Health Insurance*, led by Mr. Charles F. Honeywell.

## SOCIAL PROGRAM

*Dinner*—Saturday evening honoring Dr. James R. Judd on the occasion of his 70th birthday; Ala Wai Commissioned Officers Club.  
*Golf*—Sunday morning, Waialae Golf Club; Frank Spencer, M.D., in charge.  
*Picnic*—Sunday afternoon at the home of Drs. Marie and Robert Faus.

## NOTES

Scientific papers presented will be published in the HAWAII MEDICAL JOURNAL.

Minutes of meetings, reports, discussions at the round table, and the President's address follow:

### ADDRESS BY PRESIDENT

ERIC A. FENNEL, M.D.

Fellow Members and Guests:

"This address may become historic, but only by virtue of its brevity.

"I shall not 'point with pride' nor 'view with alarm.' I shall try to review briefly the pertinent events of the past year.

"You elected and re-elected me your president. My first reaction was boundless surprise; my second, heart warming pleasure; but my third, in rapid order, dismay—dismay at my unpreparedness and ignorance and fear of the things that I should do but for which I was not qualified.

"Today, when I bid you farewell and Aloha there is still in my heart and mind that same dismay and fear; the things I should have done, haunt me." That is quoted from my address of last year and it still holds good. Since so few of you heard it and fewer read it, I do not fear the charge of plagiarism.

When last I stood in this position, we were in the midst of two wars, the one in Europe and the other in our front yard, in the so-called Pacific, not even to mention our own, private, uncivil war with Procurement and Assignment. V bombs were falling hot and heavy over England; the expensive campaigns on the Pacific atolls foreshadowed the price we would have to pay to invade Japan. It was a most unhappy time.

Then came the "break-through" in Europe and V-E Day; the fire bombs over and in Tokyo and the two-billion-dollar atom bombs over Hiroshima and Nagasaki; and then, unexpectedly suddenly, V-J Day. For us it came appropriately on Labor Day—for Labor had helped the armed forces win the wars and not least among the laborers were the doctors of Hawaii Nei.

If I had known how soon these momentous days were to come, I certainly would not have accepted this office, for the things undone haunted me and still haunt me. All I can now say is that I am exceedingly proud of the honor you have conferred on me and that I have done my poor best.

Before I go any further I wish to thank publicly the various committees and their chairmen who have served our needs during the year; they are much too numerous to mention individually.

As you all know, without the aid of Mrs. Edith C. Bennett, our competent executive secretary, we could not have carried on and not only I, but you, owe her a debt of deep gratitude. Her dual role of being our secretary, and that of the Honolulu County as well, has increased the efficiency of Hawaiian organized medicine.

Dr. Arnold, Jr., has done a good job as Editor of our Journal and when I say "job" I mean job, for there is a great deal of work and worry involved.

Your Council met once during our fiscal year, coincidentally with the Association of Plantation Physicians. No matters of great importance or controversy developed.

The newly instituted policy of the Hawaii Sugar Planters Association, whereby not only labor but management as well, received free full medical and hospital care was discussed at length. No definite conclusion could be arrived at, at that time, for the plan had been in operation too short a period. But our principles—the principles of organized medicine—were again and again reiterated: "Free choice of physician for the patient and fees for those services rendered, to the doctor."

It was concluded by the Council to make an effort to have those principles apply also to the medical indigents, not otherwise cared for, through the Department of Public Welfare. Such an effort was made but we ran afoul of much red tape and the existing laws, which, however, could be changed by the next legislature. That will be a problem for your next committee on Public Policy and Legislation.

The Territorial Workmen's Compensation Fee Schedule became an accomplished fact and is in use.

The Hawaii Medical Service Association has been extended to Kauai and to Hawaii; it is to be hoped that the Maui organization will follow soon.

That Territory wide application is of importance, for in all probability, the medical care of the Veterans (and we may have anywhere from 20,000 to 50,000) for service connected disabilities, will be handled through the doctors of the H.M.S.A. and will thus assure for Veterans a free choice of physician and assure the physician, via the H.M.S.A. and the Veteran's Administration, cash payments for services rendered on the modified and amplified fee schedule of the H.M.S.A., Group B. This is in line with the policy of the medical director of the Veteran's Administration, Maj. General Paul Hawley, whose able address on the subject, before the Council of the A.M.A., was published in the December 22, 1945, issue of the *Journal of the A.M.A.*

The local groundwork has been laid. It will be a task for our new President, for the new manager of the H.M.S.A. and for the new local medical director of the Veteran's Administration.

I think our Charter and By-Laws have been properly amended. After much confusion and effort, two meetings with proxies and three pages of legal assistance, at \$100.00, I think we may safely elect a president elect and extend the term of office of the Secretary and Treasurer.

The President, President-Elect, the retiring President and the long term Secretary and Treasurer should make a good team for service; five heads are always better than one. I shall be happy to be relieved of the responsi-

bility of office but I shall take real pleasure in helping with what I have learned in these past two years.

As in the previous year, this year I again met with each of the component county societies. At Honolulu, I met with its Board of Governors, which transacts its business. These visits were indeed a real pleasure. At each meeting we had a very full agenda, the men spoke freely and without inhibition and it offered a good opportunity for the exchange of ideas concerning what the other societies were doing and thinking.

I am happy to say that there was no obvious internal warfare nor bitter controversy within our Association during the past two years; possibly our members were too tired and overworked for that. Possibly now, that peace has broken out, there will be more time and energy for differences of opinion, which may redound to the good of the Association.

This 56th meeting of our Association in the year of our Jimmie Judd, 70 (he always has been a loyal worker for organized medicine), seems about to be a real success. It is somewhat different, and yet so similar, to the meetings of long ago.

Our Association was legally founded on May 19, 1856, in the Kingdom of Hawaii. Recently I found some dust covered volumes in the attic—they were some of the earliest publications of our Association. (They will soon be added to the library of the Honolulu County Medical Society.) The oldest one is the Transactions of the Seventeenth Annual Meeting of the Hawaiian Territorial Medical Society held in Honolulu, November 21, 22 and 23, 1908. Had there been a meeting each year it would have been the 52nd instead of the 17th, and this year we would be holding our 90th annual meeting. But in 1908, Dr. A. N. Sinclair was President; the Secretary and Treasurer was Dr. W. D. Baldwin, but the latter had resigned and the vacancy was filled by Dr. J. R. Judd. For the following year they elected Dr. F. Howard Humphris President. Dr. Humphris returned to England, and the vacancy was filled by Dr. J. R. Judd. There were 63 members. The only ones I know to be alive today are Doctors Homer Hayes, George Herbert, J. R. Judd, I. Katsuki, Will Osmer, F. L. Putman, J. H. Raymond, L. L. Sexton and G. F. Straub.

Apparently the Society had been reorganized in 1892 as the Hawaiian Territorial Medical Society—ah, what's in a name?—with Dr. John S. McGrew as President, which office he held through 1897. The meeting of 1908 was held at the Pacific Club. Dr. Judd, as Secretary-Treasurer, listing the papers of that current year, includes the following:

Dr. Brinckerhoff:

"Notes on the Reaction of Lepers to Moro's Pertuberculin Test."  
"A Note on the Possibility of the Mosquito Acting in the Transmission of Leprosy."

Dr. Cofer:

"Plague Conditions in Seattle."

Dr. Hodgins:

"A Case of Inversion of the Uterus."  
"A Case of Placenta Praevia,"  
"A Case of Hematocolpos."

Dr. Humphris:

"The A.B.C. of the Opsonic Theory."  
"Blood Pressure."

Dr. Judd:

"Impressions of Clinics in the U.S. and in Foreign Countries (Italy, Switzerland, Paris)."  
"Operative Treatment of a Case of Acute Haemorrhagic Pancreatitis."

Dr. Sinclair:

"Adrenalin Inhalant."  
"A Hawaiian Cure for Tuberculosis."

Dr. Straub:

"A Case of Perforated Ulcer of the Duodenum."



Included in the program of this 1908 session were the following papers:

- "Control of Leprosy by Segregation."
- "Goutiness."
- "Water Supply of Honolulu, with Suggestions for Improvement."
- "Suggestion and Suggestibility."
- "Some Medical Things Japanese."
- "Recent Results in Physico-Chemic Investigations and Their Application in Therapeutics."
- "A New and Simplified Method for the Demonstration of the Bacillus of Hansen."

On the second day of the meeting, Dr. Waterhouse, assisted by Doctors Straub and Collins, gave a surgical clinic at The Queen's Hospital. A case of appendicitis was operated on by McBurney's method. After the clinic the visitors enjoyed refreshments provided by Mr. Eckardt, superintendent of The Queen's Hospital.

The members and their guests then repaired in automobiles (get that!) to Waiiale, the villa of Mr. Allan Herbert.

- The final session included the following papers:
- "Examination of Eyes, Nose and Throat of School Children."
- "Some Disorders of Inhibition."
- "What Shall We Do to Prevent Tuberculosis?"
- "Advances in Surgery of the Vascular System" (by Judd).
- "Report on Work in Plague Laboratory."
- "Electricity in the Relief of Pain."

They wound up their meeting, as we are again doing, with a banquet, but there were no speeches at that one; they substituted "an original play which was amusing and clever." I'll bet!

The menu is better seen than heard; it listed the following:

Stomachics		
Meloncolics		
Aqua Tortosa Virida		
Accessories		
Celery en branche,	Pearl Onions,	
Salted Almonds,	Stuffed Olives,	Pickled Walnuts,
Pois(s) on.		
Blood,	Serum	
Prepared Ptomaines in Mullet,		
Pasteur Tuberoses,	Cholera Morbus in Wafers	
On Trays.		
Enteric Infected Bivalves,	Laboratory Pets (dissected).	
The Brother-in-Law's Donation.		
Newspaper Comment on the Profesh.		
The Doctor (from a lay point of view).		
The Happy Future (no more quacks).		
The Doctor's Friend,		
Eat Set Err Us.		

Their transactions say: "The following verse, which appeared on the program, is worthy of perpetuation":

"L'Envoi  
(With a double apology to Rudyard Kipling.)

"When Life's practice is ended, and the catgut is twisted and tied,  
And our last diagnosis has failed us, and our favorite patient has died,  
We shall rest—and God knows we shall need it—lie down for an aeon  
or two,  
Till the Maker of all the good doctors shall set us to labor anew.  
And those who have made good shall be happy, and practice as angels  
in white,  
And fly on their rounds in the morning, and never get called out at  
night;  
With all operations successful, the hospital built of pure gold,  
Sure Eckardt will be in his glory, and Cleghorn will never grow old.  
Then all of our colleagues shall love us. And never a patient shall  
blame;  
No Wallach shall humbug for money—no Cofer shall labor for fame—  
But all diagnoses agreeing, with the knife of the heathen god Budd,  
They'll remove the appendix and liver, o'erlooked here by Collins and  
Judd."

As you may have noticed, I live and think more in the past than in the future; therefore, farewell, and  
Aloha.

### MINUTES OF MEETING COUNCIL

Thursday, May 2, 1946, 6:00 p.m., Pacific Club

*Present:* Dr. Fennel presiding; Drs. Gaspar, Phillips, Wallis, Bell, Pinkerton, Richert and Sanders.

*Annual Meeting 1947:* The date and place of the next annual meeting were discussed.

**ACTION:** On motion of Dr. Pinkerton it was voted to recommend to the House of Delegates that the next meeting be held on Kauai, May 1, 2, 3 and 4 and that

a registration fee of at least five dollars be charged.

**Nominations:** The report of the Nominating Committee was read and approved for referral to the House of Delegates.

**Fee Schedule:** The Honolulu County Industrial Accident Fee Schedule has proved satisfactory for use on all the islands.

**ACTION:** On motion of Dr. Gaspar, seconded by Dr. Richert, the Council voted to recommend to the House of Delegates that this fee schedule be made the Industrial Accident Fee Schedule of the Hawaii Territorial Medical Association.

**Convalescent-Nursing Home:** During the past year a fund has been started and a site acquired for this institution.

**ACTION:** On motion of Dr. Bell, seconded by Dr. Wallis, the Council voted to recommend to the Delegates that the Hawaii Territorial Medical Association continue to heartily endorse the Convalescent-Nursing Home.

**Simplified Laboratory Forms:** A great amount of time is consumed in filling out numerous copies of complicated laboratory forms required by the Board of Health.

**ACTION:** On motion of Dr. Wallis, the Council voted to recommend that the Delegates request the Board of Health to review its official laboratory forms with a view toward simplification as far as possible.

**Laboratory Regulation:** Private laboratories are now voluntarily regulated by the Board of Health.

**ACTION:** On motion of Dr. Sanders, seconded by Dr. Wallis, the Council voted to recommend to the Delegates that the Board of Health be requested to give this Association a statement of what has been accomplished in the regulation of laboratories, what is being planned, and what is contemplated to be brought before the Governor or the Legislature.

**Civil Service Positions:** Because of insufficient pay, desirable applicants cannot be secured for two important positions: (a) Director of Laboratories, Board of Health, and (b) Assistant Physician, Kalaupapa. Actually two assistant physicians are needed at Kalaupapa.

**ACTION:** On motion of Dr. Phillips, seconded by Dr. Wallis, the Council voted to request the Delegates to go on record urging that the Civil Service Commission make these positions so financially attractive that proper services may be secured.

**Registration Fee:**

**ACTION:** On motion of Dr. Bell, seconded by Dr. Richert, it was voted that a five dollar registration fee be charged for this year's annual meeting.

**Auditor's Report and Budget:** The auditor's report for the year was read and approved. The following budget was presented for the coming year:

CASH BALANCE MARCH 1, 1946:			
Petty Cash Fund.....	\$	25.00	
Bank of Hawaii.....		3,860.81	
Bishop Bank—Savings Account.....		817.60	
			\$4,703.41
INCOME:			
Dues—302 active members at \$15.....	\$	4,530.00	
Journal:			
Advertising .....		4,000.00	
Subscription and sales .....		1,300.00	\$ 9,830.00
EXPENSES:			
Salaries .....	\$	2,400.00	
Rent .....		480.00	
Journal expense .....		7,000.00	
Travel .....		100.00	
Miscellaneous .....		600.00	
Library appropriation .....		500.00	11,080.00
			Net Loss \$ 1,250.00

**ACTION:** On motion of Dr. Bell, seconded by Dr. Phillips, it was recommended that the proposed budget be accepted, specifying that the \$500 donation to the Honolulu County Medical Library should not be made at this time, but held for consideration later in the year when more accurate information on the state of the treasury may be available.

**Free Choice of Physician for Medical Indigents:** Such a plan is in effect in great measure in Honolulu, but not on the other islands or in rural Oahu. It was brought up by Dr. McArthur at the last Council meeting and further discussed at this meeting. Meantime Dr. Fennel had conferred with Dr. Wilbar and Mr. John Wilson on the subject.

**ACTION:** On motion of Dr. Gaspar, seconded by Dr. Phillips, it was recommended that this question be referred to the respective County Societies for study and recommendation to the Council.

**One Year Residence Law:** After much discussion, a motion was made by Dr. Bell, seconded by Dr. Pinkerton, recommending that this controversial issue be referred to the incoming Council.

**Veterans' Administration and the HMSA:** The Council urged that action be taken to effect a practical plan for medical care of veterans through cooperation with HMSA.

**ACTION:** On motion of Dr. Pinkerton, seconded by Dr. Gaspar, it was recommended that a committee of three doctors be appointed to work out an acceptable fee schedule and other details of such a plan for veterans' Medical care.

**Full Medical Care for All Plantation Employees:** All employees, including management, have been receiving free medical care on the plantations since last fall. The doctors on other islands have had varied experiences with the system, which HSPA said was to be in operation for one year.

**ACTION:** It was recommended that the problem be referred to the Plantation Physicians Association for ultimate reference to the next Council, and that Dr. Wallis be appointed to carry the matter to the Plantation Physicians.

**Research Institute of Tropical Medicine:** Dr. Withington was called in to the meeting at his request. He represented Dr. Fred Lam, who had been asked by the Board of Regents, University of Hawaii, to seek the approval of the Council for a proposed research institute of tropical diseases and tropical medicine in connection with the University of Hawaii.

**ACTION:** On motion of Dr. Pinkerton, seconded by Dr. Bell, it was the consensus of opinion of the Council that the establishment of a research institute of tropical diseases at the University of Hawaii be favorably recommended. Dr. Fennel cast the only dissenting vote.

L. A. R. GASPAR, M. D.

*Secretary*

#### MINUTES OF MEETING HOUSE OF DELEGATES

Friday, May 3, 1946, 3:30 p.m., Mabel Smyth Auditorium

**Present:** Dr. Fennel, presiding; Dr. Phillips, treasurer; Drs. H. M. Patterson and Yoshina (Hawaii); Drs. L. Q. Pang, Mermod, Stevens, Kepner, W. K. Chang, and Fujiwara (Honolulu); Dr. Brennecke (Kauai); and Dr. Anderson (Maui).

**Reports:** The following reports were read by title, accepted and placed on file:

#### *Reports of Component Societies:*

Hawaii County—by Dr. Yoshina (Exhibit A).  
Honolulu County—by Dr. Arnold, Jr. (Exhibit B).  
Kauai County—by Dr. Harris (Exhibit C).  
Maui County—by Dr. Sanders (Exhibit D).

#### *Report of the Council:*

Dr. L. A. R. Gaspar (Exhibit E).

#### *Report of the Secretary:*

Dr. L. A. R. Gaspar (Exhibit F).

#### *Report of the Treasurer:*

Dr. Lyle G. Phillips (Exhibit G).

#### *Reports of Committees:*

Journal Committee—Dr. Arnold, Jr. (Exhibit H).

Committee on Public Policy and Legislation—Dr. R. O. Brown (Exhibit I).

Cancer Committee—Dr. Buzaid (Exhibit J).

Committee on Psychiatry and Neurology—Dr. Kepner (Exhibit K).

Health Education Committee—Dr. Devereux (Exhibit L).

Board of Management, Mabel Smyth Bldg.—Dr. Arnold, Jr. (Exhibit M).

War Recognition Committee—Dr. Stewart (Exhibit N).

Workmen's Compensation Committee—Dr. Pinkerton (Exhibit O).

Crippled Children's Fee Schedule Committee—Dr. Stewart (Exhibit P).

Medical Advisory Committee of the Bureau of Maternal and Child Health—Dr. Fred Lam (Exhibit Q).

Medical Advisory Committee of the Bureau of Crippled Children—Dr. Stewart (Exhibit R).

The chairman gave a summary of the Council meeting held the previous evening.

Dr. Patterson spoke about legislation. He felt the committee should not wait until the Legislature is in session. Preparations for any legislation should be made well in advance.

The one year residence requirement was discussed.

The meeting adjourned at 3:55 to meet again at 12 Saturday noon in the Library of The Clinic.

L. A. R. GASPAR, M. D.

*Secretary*

#### SUMMARY OF ACTIVITIES OF THE HAWAII COUNTY MEDICAL SOCIETY

##### Exhibit A

TERUO YOSHINA, M.D., *Acting Secretary*

In the April 1st tidal wave both Dr. W. M. Bond, our secretary, and all the secretary's records were on the casualty list—Dr. Bond is bedridden and the secretary's records were washed away with his home. The following records were copied from the HAWAII MEDICAL JOURNAL. We had an active year as far as the scientific program was concerned.

Dr. R. Eklund, our president, left in August 1945 for a new position on Molokai and Vice-President Dr. W. Leslie succeeded him. Dr. W. Seymour was elected vice-president.

The Library of the Hawaii County Medical Society was moved from the Staff Room of the Hilo Memorial Hospital to the first floor and named Dr. Fred Irwin Medical Library.

The HMSA started operating on the Island of Hawaii in March, 1946.

#### SUMMARY OF ACTIVITIES OF THE HONOLULU COUNTY MEDICAL SOCIETY

##### Exhibit B

HARRY L. ARNOLD, JR., M.D., *Corresponding Secretary*

Outstanding in the past fiscal year of our Society were the postponement until October of the annual elections, occasioned by the uncertainty of tenure—as civilians—of some of the potential candidates; the "spark-plug-



ging" of the Society by the new short-term President, Dr. Nils P. Larsen; the activity of the Public Relations Committee under its Chairman, Dr. Homer Izumi; the practice of announcing each meeting of the Society through a boxed advertisement in the two major newspapers; the practice of opening each monthly meeting of the Society by a half-hour medical movie; Dr. Larsen's eloquent argument, for the Society, favoring statehood for Hawaii; the retirement, and election to honorary membership, of Drs. James Morgan and George F. Straub; the death of three members, Drs. Zen Sato, Walter Chinn, and Arthur G. Hodgins.

Eighteen new members, six service members and two transfer members were added to the rolls during the year, bringing the roster to 233 active regular members and a grand total for all classes of 317 members.

Detailed information regarding the year's activities may be found under County Society Reports in the May-June issue of the JOURNAL, in a section entitled *Review of the 56th Year of the Medical Society in Honolulu*.

## SUMMARY OF ACTIVITIES OF THE KAUAI COUNTY MEDICAL SOCIETY

### Exhibit C

H. W. HARRIS, M.D., *Secretary*

The Kauai County Medical Society conducted its regular monthly meetings on the second Wednesday of each month at the G. N. Wilcox Memorial Hospital.

Included in the activities of the Society during the past year, were the following major subjects, Public Welfare, Legislative action concerned with the medical profession, and scientific discussions.

#### *Public Welfare:*

Psychiatric Detention Ward. By dint of hard work and diligent effort, the committee has attained positive results.

The first question faced was where to house mentally ill patients awaiting transportation to Oahu. There had been two regrettable incidents resulting from detention of the patients in the County jail. The second question was regarding financial responsibility of hospitalization and medical care of these patients.

The Wilcox Memorial Hospital agreed to furnish suitable accommodations for such patients. The County is to be responsible for financing hospitalization. The patient, if financially able, will pay for medical care given during this hospitalization. In event that the patient is unable to pay for medical care, the County shall be responsible for both hospitalization and medical care of the patient.

The solution of this problem involved a hard, two year fight.

Kauai Medical Service Plan. The Society has, for the last two years, supported and aided the K.M.S.A. It is now well established and functioning very successfully. The Association has a membership of 700 and is energetically attempting to increase the membership further with all the means at its command.

Central Laboratory. Kauai is without a central laboratory as of March 31. There has been no pathologist on the island throughout the war and up to the present time.

The Medical Society has inaugurated a plan whereby the various groups interested in a central laboratory were

contacted with the results that a fairly attractive setup is offered, the idea being to establish and support a pathologist and central laboratory for Kauai.

Home for the Aged Infirm. The committee working on this project has continued in its endeavor to initiate activities to accomplish the founding of such a home on Kauai.

Positive results have not been realized, as yet, due to the many and difficult problems inherent in such a project.

#### *Legislative Activity:*

The Policy and Legislation Committee's reports and recommendations concerning medical bills before the Territorial Legislature are now sent to the president and secretary of the Society, and with their approval, are sent direct to the Kauai members of the Legislature.

#### *Scientific Discussions:*

These were regrettably few and far between. However, a number of speakers, men prominent in their various fields, reached the Society's meetings.

#### *Personnel:*

The Society lost two members, Dr. Tadao Hata in July, by transfer to the Honolulu County Medical Society, and Dr. Yen Pui Chang, by transfer of his practice to Honolulu recently.

Dr. A. N. Ecklund, associate member, has returned from service in the Navy, and will not resume his laboratory services here.

On the other side of the ledger, we welcomed back Dr. Burt O. Wade who returned from service to resume his work in Waimea.

Dr. Donald Depp, a former service man, has taken over the position of plantation physician for the Koloa Sugar Company, replacing Dr. Webster Boyden who very ably filled the position during the war while carrying on his specialized practice in E.E.N.T.

Dr. William Toney and Dr. Patrick M. Cockett, two former service doctors, are new additions to the community and are awaiting formal acceptance into the Society. Dr. Toney is at the Samuel Mahelona Hospital and Dr. Cockett is plantation physician for the Kealia District, Lihue Plantation Company, Ltd.

Members still serving in the armed forces, as far as can be determined, are Drs. Joseph Walthers, W. S. Kawaoka, and H. C. Chang.

## SUMMARY OF ACTIVITIES OF THE MAUI COUNTY MEDICAL SOCIETY

### Exhibit D

JOHN SANDERS, M.D., *Secretary*

At the time of the annual meeting this year, the Society had 24 active members and one honorary member. Dr. Homer Izumi of Kula transferred to the Honolulu Society. Dr. Hawley Seiler left for the mainland. Drs. E. H. Anderson, T. W. Cowan and James Fleming returned from the services. Dr. Francis Chu of Pukoo, Molokai, and Dr. M. Tofukuji of Wailuku were elected to membership.

The Society's stand on the free choice of physician fee schedule for services performed, as in relation to the Department of Public Welfare still stands but has gained no further recognition. The H.M.S.A. plan was not or-



ganized on Maui as anticipated due to the general lack of interest among the population and publicity. There are plans afoot to reopen the issue. The biggest issue of the year probably was the unheralded free medical care plan for all plantation employees from the manager on down which was instituted by the Hawaiian Sugar Planters' Association. The consternation Territory-wide was profound and Hawaiian Sugar Planters' Association has made no official explanation for its sudden action. It is believed its term of life will be for one year only.

## REPORT OF THE COUNCIL

### Exhibit E

L. A. R. GASPARD, M.D., *Secretary*

The Council held only one meeting this year. It was called for November 8 in Honolulu to discuss the Revision of the By-Laws and the free medical care for all plantation employees.

It was voted that the President should call a special meeting for January 2 to provide changes in the By-Laws to elect a President-Elect annually and to change the term of the secretary and the treasurer from one to three years. Legal assistance was authorized.

The Council approved a report on the HAWAII MEDICAL JOURNAL which told of arrangements to change printers from Watkins to the Star-Bulletin and a plan to include the nurses in the Journal with a special rate to the Territorial Nurses' Association of 500 subscriptions for \$500.00.

It was decided to ask the Blood Bank if Dr. Arnold Sr. might be recognized as representing the Hawaii Territorial Medical Association after the dissolution of the O.C.D.

The Council approved of circulating to the other County Societies the minutes of the Honolulu County Board of Governors.

A contribution of five dollars a month for one year beginning August 1, 1945 toward the rent of the Nursing Service Bureau was approved.

Endorsement of the Convalescent-Nursing Home was given.

A contribution not to exceed \$200 to the Admiral Nimitz Navy Day Gift Fund was authorized. The actual contribution made from the Association was \$100.00.

Dr. Shanahan and Dr. Palma were appointed to interpret to the Association the findings of a committee appointed by the governor to study health, hospital and burial costs. The problem of free medical care for all plantation employees and its effect on each island was discussed. No action was taken.

Dr. McArthur brought up the matter of free choice of physician for indigent patients. It was agreed that he should submit drafts of letters for Mr. Wilson and Dr. Wilbar on this subject.

## REPORT OF THE SECRETARY

### Exhibit F

L. A. R. GASPARD, M.D.

The total membership of the Association in all classes is 397, with a paid regular membership of 302, an increase of 18 over the previous year. By counties this membership is made up as follows:

	Regular Members	Members in Service	Service Members	Honorary Members	Total All Classes
Hawaii .....	32	2	0	2	36
Honolulu .....	233	18	49	17	317
Kauai .....	13	3	1	2	19
Maui .....	24	0	0	1	25
Total.....	302	23	50	22	397

The total number of physicians licensed to practice medicine in the Territory as of April 1, 1946 is 381. Of these, 325 belong to the Association, making 85 per cent, as compared to 92 per cent last year.

## REPORT OF THE TREASURER

### Exhibit G

LYLE G. PHILLIPS, M.D.

Last year our budget provided for an estimated loss of \$20. Actually we made a profit of \$8.92 net income for the year. At the close of the fiscal year, February 28, 1946, we had a balance of \$4,703.41 in the Treasury. A budget for next year has been drawn up providing for a loss of \$1,250.00 due to extra expense for the Journal.

The books of the Association were found by the auditor to be in good condition. The auditors' report is submitted herewith.

## REPORT OF THE JOURNAL COMMITTEE

### Exhibit H

HARRY L. ARNOLD, JR., M.D., *Editor*

Six bi-monthly issues of the HAWAII MEDICAL JOURNAL have been published, as usual, since the last annual meeting of the Association. These have contained a total of 368 pages of printed matter, exclusive of the front cover—8 more than in the preceding fiscal year. The increase is in the advertising department; the average issue this year contained 33 pages of text (exactly the same as last year) and 29 of advertisements (2 more than last year). The average number of original articles in each issue has increased from 3 (last year) to 5½.

Beginning with the January-February issue of this calendar year, the JOURNAL's format was changed. Printed now by the Star-Bulletin instead of Watkins Printery, the JOURNAL is on glossy paper, self-covered, printed by letterpress instead of offset, and measures 8 by 11 inches (the standard size for state medical journals) instead of 8¼ by 10½ as formerly. This results in a very much better and more professional-looking magazine, at a somewhat increased cost, as indicated below.

At the same time that this change was made, the JOURNAL opened a section entitled *Inter-Island Nurses' Bulletin*, the official publication of the Nurses' Association, Territory of Hawaii, with the result that our circulation was increased from 606 to 1106. This enables us to raise our advertising rates, but unfortunately, most of the contracts were already written for 1946. Consequently our increased costs will not be met by increased advertising revenues until 1947. We will therefore operate at a greater deficit than usual this year.

One very definite advantage gained for the Medical Association by our JOURNAL, which is not reflected in any financial statement, is the exchange list which has been built up. By this means our Medical Library receives 73 periodicals and other publications without cost. Exchanges have been established with journals in Argentina, Australia, Belgium, Brazil, Canada, Cuba, England, Puerto Rico and Switzerland, as well as all parts of the mainland.

The JOURNAL continued to operate at a deficit during the fiscal year 1945-46. However, the deficit was \$27.69 less than last year, which is a step in the right direction. Efforts are now being made to put the JOURNAL on a more business-like basis so that it will pay for itself from advertising and subscriptions.

A resume of the financial status of the JOURNAL for the past year follows:

	Per Year	Per Issue
Expense .....	\$4,045.88	\$676.31
Income:		
Advertising \$2,665.29		\$444.21
Subscriptions 871.70	3,536.99	145.28
		589.49
Deficit .....	\$508.89	\$86.82

Your committee respectfully submits that the greatly improved appearance of the JOURNAL, and the relatively bright outlook for the future, warrants this increased expense this year, and recommends the continued publication of the HAWAII MEDICAL JOURNAL on the same basis as heretofore.

## REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

### Exhibit I

R. O. BROWN, M.D., *Chairman*

Since the Territorial Legislature did not meet this year, the Legislative Committee had a very pleasant year.

Senate Bill 1318 known as the "Maternal and Child Welfare Act of 1945" was the only matter referred to this committee. A copy of the bill was circulated to members of the committee for their comments. These comments, indicating a generally unfavorable reaction, were passed on to Delegate Farrington and to Dr. Wilbar of the Board of Health.

## REPORT OF THE CANCER COMMITTEE

### Exhibit J

L. L. BUZAID, M.D., *Chairman*

The Committee has assisted the Board of Health in planning and organizing the 1946 April cancer control month campaign for the Territory. Physician-speakers were selected to address seventeen lay clubs, groups and organizations on Oahu and one group on Maui. The campaign on Hawaii was disrupted because of the tidal wave; however, during May on Hawaii there will be a series of medical meetings, in which a Honolulu physician will participate, on the subject of cancer control.

## REPORT OF COMMITTEE ON PSYCHIATRY AND NEUROLOGY

### Exhibit K

R. D. KEPNER, M.D., *Chairman*

During the year, the Committee has continued to work on the matters presented in the report for last year, which is to be found in the HAWAII MEDICAL JOURNAL for July-August, 1945, notably in regard to the model legislation which has been under discussion for some time. In this direction progress has been made in that the Committee on Public Health of the Honolulu Chamber of Commerce has agreed to furnish legal talent to our committee for the drafting of such legislation.

In addition legislation relating to mental health which was passed at the 1945 legislature was reviewed. A summary of these laws will appear in the HAWAII MEDICAL JOURNAL for March-April, 1946, in the section Psychiatric Comment. In addition, those bills which failed to pass because of certain objectionable features were scrutinized by our Committee and a working agreement arrived at so that this legislation may be re-introduced in a form acceptable to all and consistent with the present needs of the community. These recommendations also will be found in the above-mentioned article.

Your Committee has also discussed a number of other items:

- (1) Dr. Mildred Staley's proposed registration act for mental defectives.
- (2) The over-lapping functions of the City and County Health Department, the Department of Public Welfare, and the Bureau of Mental Hygiene in regard to hospitalization of indigent mentally ill persons.
- (3) The formation of a Territorial Department of Mental Health, possibly to include the Department of Institutions, the Bureau of Mental Hygiene, the Child Guidance Clinic, and the Psychological Clinic.
- (4) Facilities for psychiatric examination, consultation, and management of prisoners at the Oahu Prison with perhaps a community for segregation of certain psychopathic recidivists under an indeterminate sentence administered by an authority or commission of competent persons including psychiatrists.
- (5) Hoodlumism, gang beatings, and juvenile delinquency, with perhaps more severe sentences for gang beatings.
- (6) The recommendation that persons with convulsive diseases and disorders be not permitted to drive cars unless these seizures are under control, and that reporting of such persons to the Examiner of Chauffeurs be made mandatory by law.
- (7) The recommendation that police examinations and questioning of juvenile girls for sexual or other offenses be carried out solely by trained policewomen, and that such personnel be provided for the same.

An attempt has been made by your Committee to maintain a liaison with the other agencies such as the Hawaii Territorial Society for Mental Hygiene, etc., in furthering their endeavors and cure.

It is still hoped that a speaker on psychiatry may be induced to come here for one of our post-graduate courses. This is particularly important in view of the fact that some 45% of discharges from the armed forces were for neuropsychiatric reasons and that presently some 61% of the veterans hospitalized are there for the same reasons.

It has been difficult to obtain papers for the section *Psychiatric Comment* in the HAWAII MEDICAL JOURNAL. Your Chairman implores all to contribute something. The former title, *Neuropsychiatric Comment*, has been changed to *Psychiatric Comment* as a result of editorials in the *American Journal of Psychiatry* and elsewhere protesting the term neuropsychiatry as hybrid and meaningless.



It is requested that everyone submit his ideas or suggestions to some member of the Committee.

The thanks of the Chairman are hereby extended to all for their assistance and cooperation.

#### **REPORT OF THE HEALTH EDUCATION COMMITTEE**

##### **Exhibit L**

J. W. DEVEREUX, M.D., *Chairman*

The Health Education Committee held no meetings during the year. No matters were referred to this committee for action.

#### **REPORT OF THE BOARD OF MANAGEMENT, MABEL L. SMYTH MEMORIAL BUILDING**

##### **Exhibit M**

HARRY L. ARNOLD, JR., M.D., *Chairman*

During 1945 the first floor of the building was used by 34,432 persons, twice as many as used it during 1942, and one-third more than used it during 1944. Committee meetings totalled 252, teas and cocktail parties 85, and luncheons and dinners 82, and the auditorium was used 218 times. The Honolulu County Medical Library on the second floor was visited by over 7,000 persons, nearly double the number of visitors in 1944.

The revenue to the building from the first-floor users totalled over \$3,000.00, more than three times its budget estimate. This, together with the fixed rental income of \$5,095.00 brought the year's revenues to \$9,979.48 and the year's net profit to \$3,852.22. The building's cash balance at the close of 1945 was \$12,271.21.

At the close of the year, Mr. Richard Bell of Alexander and Baldwin replaced Mr. Charles Honeywell on the Board of Management; Mrs. Hazel Mattson replaced Miss Albertine Sinclair; and Dr. Joseph Palma replaced Dr. Lyle G. Phillips. Mrs. Thelma Akana and Dr. H. L. Arnold, Jr. remained on the Board for another year.

#### **REPORT OF THE WAR RECOGNITION COMMITTEE**

##### **Exhibit N**

STEELE F. STEWART, M.D., *Chairman*

A preliminary survey of all the doctors in the Islands was made to find out which ones had been involved in war work.

As these reports are being segregated and further studies made, we ask the continuance of the Committee.

#### **REPORT OF THE WORKMEN'S COMPENSATION COMMITTEE**

##### **Exhibit O**

F. J. PINKERTON, M.D., *Chairman*

Your committee on Industrial Accident Fee Schedule is pleased to report that since the adoption of the fee schedule prepared by us there have been no complaints of major importance. The committee believes that the adoption of the fee schedule and the standard forms for physicians' first and final reports for industrial accident cases represents one of the greatest forward strides we have made in industrial accident insurance work.

The Hawaii Medical Service Association requested the services of your committee on certain phases of their fee schedule and, after reviewing and studying the various classifications of the H.M.S.A., a report was submitted which is now in the hands of the Board of Directors of the H.M.S.A. We believe this report will produce fruitful results. This brings to our minds the value of public relations for the medical profession in that we have been called upon to serve in other capacities, though such capacities are allied with the over-all picture of fees and fee schedules. Two members of your committee, interested in that type of work, have been asked to review and recommend changes in the Bureau of Crippled Children's fee schedule. This is in the process at the present time.

Abortive attempts have been made to eliminate the 15% surcharge which your committee was able to gain acceptance of by the Industrial Accident Insurance men, and which was to apply for the period of the war and six months thereafter. The 15% surcharge is still accepted and in the opinion of your committee should not be discontinued until there is a substantial revision downward in the costs of the practice of medicine.

#### **REPORT OF THE CRIPPLED CHILDREN'S FEE SCHEDULE COMMITTEE**

##### **Exhibit P**

STEELE F. STEWART, M.D., *Chairman*

The Fee Schedule Committee has not completed its work but feel in general that the Industrial Accident Fee Schedule should form the basis for a Crippled Children's Fee Schedule.

We ask the continuance of the Committee with a final report next year.

#### **REPORT OF THE MEDICAL ADVISORY COMMITTEE OF THE BUREAU OF MATERNAL AND CHILD HEALTH**

##### **Exhibit Q**

FRED LAM, M.D., *Chairman*

The committee makes the following recommendations:

##### **I. Prematurity**

- (a) That all maternity hospitals keep complete records and statistics on premature infants so that the Bureau of Maternal and Child Health may avail itself of such information in studying the total problem in the Territory.
- (b) That the Bureau include in its study and approach to the problem, emphasis upon the prevention of prematurity.
- (c) That the Society endorse the program of the Bureau of purchasing and distributing to all parts of the Territory portable incubators for facilitating safe transfer of home-born premature infants to hospitals and that the physicians be informed of the availability of such incubators and nursing service at all hours upon the physician's request.
- (d) That the Bureau and Society participate in an educational campaign to emphasize the importance of attendance by a physician during the prenatal period and starting early in pregnancy.



## II. *Maternal Health Studies*

- (a) That the Society endorse the Bureau's efforts to study factors relating to maternal and infant morbidity by means of analysis of health records and mechanical tabulation methods.
- (b) That physicians be informed that they may receive a free supply of maternal health record forms for use in their offices and that they may elect to participate in confidential statistical analysis of maternal health work.

## III. *Maternal Mortality*

That as soon as the Bureau obtains a qualified consultant physician in maternal health, detailed analyses and conferences with physicians concerning each maternal death be resumed and that the physicians cooperate to the fullest degree in making use of analysis of maternal deaths to reduce the total maternal mortality in the Territory.

### REPORT OF THE MEDICAL ADVISORY COMMITTEE OF THE BUREAU OF CRIPPLED CHILDREN

#### Exhibit R

STEELE STEWART, M.D., *Chairman*

The committee makes the following recommendations:

#### I. *Plastic Surgery*

- (a) That the Bureau of Crippled Children help finance post-graduate mainland study in oral plastic surgery by a local ear, nose and throat physician.
- (b) That the Bureau finance a visit by a leading surgeon from the mainland to work with qualified local surgeons in performing plastic surgery, especially in connection with harelip and cleft palate, and that the Territorial Medical Association endorse the project and participate in arranging for professional meetings and seminars.

#### II. *Hearing Program*

- (a) That the Society repeat its statement of the last two years that a program for hard of hearing children should be developed in the Territory.
- (b) That the program of audiometer testing in the schools should be supplemented by medical corroboration by an otologist whenever hearing loss is suspected but that the family and the family physician should first be given opportunity to review the case and participate in referring the child for further study and recommendations; that if the family physician does not refer the patient to an otologist, steps to obtain otologic consultation should be taken by the Bureau of Crippled Children.

#### III. *Congenital Anomalies Caused by Prenatal Diseases*

That the Medical Association endorse the Bureau study of the possible damaging effect of certain prenatal diseases upon the developing embryo and that the physicians make every effort to report to the Board of Health cases of measles, German measles, chickenpox, or mumps which occur in females between the ages of 15 and 50.

## MINUTES OF MEETING

### HOUSE OF DELEGATES

Saturday, May 4, 1946, Luncheon, 12 noon,  
Library of the Clinic

#### *Present:*

President—Eric A. Fennel.  
Vice President—H. E. Bowles (Honolulu).  
Secretary—L. A. R. Gaspar, Jr.  
Treasurer—Lyle G. Phillips.

#### *Councillors:*

S. R. Wallis (Kauai).  
D. B. Bell (Honolulu).  
F. J. Pinkerton (Honolulu).

#### *Delegates:*

H. M. Patterson (Hawaii).  
T. Yoshina (Hawaii).  
M. de Harne (Honolulu).  
F. D. Nance (Honolulu).  
L. Q. Pang (Honolulu).  
Leon Mermod (Honolulu).  
M. E. Stevens (Honolulu).  
R. D. Kepner (Honolulu).  
R. B. Cloward (Honolulu).  
W. K. Chang (Honolulu).  
T. F. Fujiwara (Honolulu).  
H. Izumi (Honolulu).  
M. A. Brennecke (Kauai).  
E. H. Anderson (Maui).

*Reports:* The annual reports of officers, societies and committees were read by title.

*ACTION:* By motion the reports were accepted, ordered to be transmitted to the editor for publication in the HAWAII MEDICAL JOURNAL, and placed on file.

#### *Next Annual Meeting:*

*ACTION:* On recommendation of the Council, it was agreed that the 1947 annual meeting should be held on Kauai, May 1, 2, 3 and 4 and that a registration fee of at least five dollars should be charged to defray expenses.

#### *Fee Schedule:*

*ACTION:* On recommendation of the Council, it was voted that the Honolulu County Industrial Accident Fee Schedule should become the Hawaii Territorial Industrial Accident Fee Schedule. The expense of the next printing will be borne by the Territorial Association.

*Convalescent-Nursing Home:* The Territorial Association will continue to approve the establishment of this much needed institution.

*Simplified Laboratory Forms:* The Board of Health will be requested to review its official laboratory forms with a view to simplifying them as far as possible.

*Laboratory Regulations:* The Board of Health will be requested to furnish to the Territorial Medical Association a statement of what has been accomplished in the regulation of laboratories, what is being planned, and what is contemplated to be brought before the Governor or Legislature.

*Civil Service Positions:* The Civil Service Commission will be urged to classify the positions of (a) Director of Laboratories, Board of Health, and (b) Assistant Physician, Kalaupapa, so that they may be financially attractive to properly qualified applicants. Two assistant physicians for Kalaupapa instead of one will also be urged.

*Registration Fee:* The Delegates voted to approve the charge of five dollars registration fee for this annual meeting.

*Donation to Library:* The Delegates confirmed the action of the Council in accepting the budget but specifying that the \$500 donation to the Honolulu County Medical Library be withheld until later in the year to determine whether the Treasury will have that amount available this year.

*Free Choice of Physician for Medical Indigents:* This problem was referred to the component societies with the recommendation that some plan, such as has been developed in Honolulu, be worked out in the other counties.

*One Year Residence Law:* There was much discussion of this subject and opinion was divided.

**ACTION:** On motion of Dr. Nance it was voted that a canvass be made of the members of the Territorial Medical Association asking "Are you in favor of repeal of the one year residence law by the next session of the Legislature?" that this be done before the Legislature meets, and that the results be made public.

*Veterans Administration and the Hawaii Medical Service Association:* The Delegates accepted the recommendation of the Council that a committee of three of our

doctors be appointed to work out a fee schedule with Veterans Administration to provide medical care for veterans under the HMSA plan.

*Full Medical Care for All Plantation Employees:* The problem of free medical care for higher as well as lower income plantation employees was referred to the Plantation Physicians Association for their recommendations to the next Council. Dr. Wallis was appointed to bring the matter before the Plantation Physicians Association.

*Elections:* The Nominating Committee, with Dr. Strode as its chairman, submitted the following nominations:

President: Dr. Jay M. Kuhns.

President-Elect: Dr. Robert B. Faus.

Secretary: Dr. Harry L. Arnold, Jr.

Treasurer: Dr. Fred K. Lam.

Councillors: Dr. John Sanders (Maui) replacing Dr. McArthur; Dr. S. R. Wallis (Kauai) to succeed himself.

Delegate to AMA: Dr. F. J. Pinkerton.

Alternate: Dr. F. J. Halford.

**ACTION:** The report of the Nominating Committee was accepted and the Secretary was instructed to cast a unanimous ballot for the election of these officers.

*Adjournment:* The meeting adjourned at 1:45 to continue the scientific session.

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# INTER-ISLAND NURSES' BULLETIN

*Official Publication of the Nurses' Association, Territory of Hawaii*

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THELMA M. PATTEN, R.N., Hawaii  
TSUGIE KADOTA, R.N., Kauai  
BETSY BOYLIN, R.N., Maui

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## **I: INDUSTRIAL NURSING**

VIRGINIA M. DOYLE\*

In the last few years, much has been written and spoken regarding the position of the nurse in industry. However, it is not a new field. Industrial nursing as we know it today first began to make its presence felt as an essential part of management about thirty years ago. Employers began to realize that much time and money could be saved by eliminating accidents and their causes through systematic training, education and service conducted by trained personnel. This field has developed with great strides in the past ten years.

It is due to the efforts of Miss Virginia Jones, who in the fall of 1944 brought the nurses in industry in Honolulu together for the first time, that we were able to organize. Today we are an organized Industrial Nurses' Section of the City and County Association with a constantly increasing membership. Our meetings are held every two months, with the program built around a guest speaker on some subject vital to all of us. We have now joined the National Industrial Nurses' Association and at present are realizing the advantage of group study and contact with others doing the same work, as well as the advantage of educational opportunities. Many of us are attending classes at the University of Hawaii and the YWCA, studying subjects that will enable us to have a more thorough picture of the trends in industry as well as improving our knowledge in meeting our many obligations to management, its employees, and our profession. Subjects studied include: Personnel and Industrial Relations, Safety Engineering, Post-War Psychology, and Industrial and Labor Relations.

As I mentioned before, this is not a new field and yet much is still to be desired in establishing in the minds of Industrial Management the vari-

ous public health functions of the plant nurse other than her dispensary duties.

The industrial nurse's department is a service department to her small community. She serves all, from Management to the least employee. There is a need for a first aid attendant to be present in the dispensary at all times, as the nurse's duties are not confined within the four walls of her department. They reach out to join forces with foremen, supervisors, safety engineers, safety directors and the employees in their efforts to maintain good health and good working conditions and to increase efficient production, keeping in mind at all times that the human element is the most important factor in industry.

The nurse may often assume a good part of the duties formerly assigned to the Personnel Department because of the nature of her work. She keeps in constant contact with the Personnel Manager, to see that the worker is protected, thus indirectly aiding in the prevention of accidents. She makes all arrangements for pre-placement physical examinations and may advise on the placement of handicapped employees. Frequently she helps the employee to solve his personal problems both on the job and at home. Thus the dispensary becomes a counselling and social study agency as well as a place where a cut or bruise is treated.

She keeps complete health and accident records. By having at hand a day by day account of all non-occupational and occupational illnesses and injuries, she is able to help improve health standards of the employees as well as to contribute data toward the safety program. The non-occupational illness daily records are important in that the source of an accident is often traced through them. Weekly tabulations and monthly summaries for Management will give them the picture of the health and safety conditions of the plant.

In her activities she realizes that the industrial plant corresponds to the Board of Health nurse's

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\* Chairman of the Industrial Nurses' Section, Nurses' Association, City and County of Honolulu.



district. Through her daily plant visits she makes contacts with employees who might never visit the dispensary, thus establishing confidence which at some future date may be of assistance in solving their personal problems. These daily visits also help acquaint her with the various departments and reveal the work hazards involved. During these rounds she is able to observe plant lighting conditions, plant ventilation, and work conditions, from the standpoint of fatigue factors as well as the hazards. She becomes familiar with general sanitary conditions of the plant through daily inspection of toilets and rest rooms, cafeterias and recreation areas.

Another important function of industrial nursing is the home visit. In many instances it is only through the medium of these visits that Management is able to determine the causes of dissatisfaction, absenteeism and labor turnover. In making a home visit it is essential that she maintain a friendly and cooperative attitude and that she never places herself in the position of a truant officer. It is important for her to give the impression of being willing and able to offer advice and assistance. She should use care to avoid the impression that she is there in the role of a doctor and *must never prescribe treatment*.

The first home visit is usually made to determine *why* an employee is absent from his job without previously notifying his foreman or the Personnel Department. In most cases it is wise to approach the absentee from the health angle. It is here that the nurse can succeed or fail in her task of getting him back on the job. If he is ill, the nurse may recommend that he see a physician and in a few cases may insist that the employee remain at home for a few days longer. If he has a pressing personal problem she may be able to give advice or recommend the proper agency to assist in solving his problem. If the nurse finds the absentee to be simply an "absentee" she may make recommendations to Management. In all cases, however, the home visit must be considered as a personal interview and, as such, strictly confidential. It is only in this way that she can maintain the proper relationship between herself and the employee. The home visit is definitely a tool which must be used correctly and wisely.

A good industrial nursing program is not a "hit or miss" proposition. It is only through constant planning, education and selling that Management and its employees are able to receive full benefit from the program. The industrial nurse, because of her professional background, can and should be a key person in a plant health education pro-

gram. It should be her responsibility to educate Management, employees and their families regarding their responsibilities in improving and maintaining physical and mental fitness, efficiency, a safe working environment and a good healthy home. This type of education can be carried on through the medium of conferences, talks and health bulletins in addition to frequent "on-the-job" and "at home" contacts. The industrial nurse must insure the continuance of the program through constant selling of her program to Management. This can be accomplished by showing increased efficiency and general well being of the workers and decreased absenteeism and turnover, resulting in a corresponding increase in production per man hour and decrease in medical expenses.

Many of us in Hawaii have had to learn the hard way. A few of us have worked in organizations where the nurse has been resented and only through hard work and perseverance has she been able to win over Management and employees. These days, we believe, are behind us, but the hard work is not. The role of an industrial nurse will always be hard. That's what makes it so interesting.

## II: PLANTATION VISITING NURSING

MOLLIE KIRCHGASSNER\*

Plantation visiting nurses are public health nurses, just as Board of Health nurses are public health nurses. One is hired by a plantation and the other by the Territorial Board of Health. Our aim is the same. Health is our goal.

The Island of Kauai has had plantation visiting nurses since 1917. The first nurse was hired by the Mokihana Women's Club to care for the people of the plantations. It proved to be such a valuable service that after two years the plantation took over the entire responsibility. In 1918 two more plantations hired visiting nurses. These nurses carried a generalized program with the exception of tuberculosis nursing. The tuberculosis work was done by a visiting nurse hired by the Territorial Board of Health. This work started in 1914 and the nurses supervised all tuberculosis cases on the entire island. At present I believe most plantation nurses prefer to supervise their own tuberculosis cases. It gives us a more complete and unified health picture of our family and plantation. My own plantation has had a visiting nurse for the past seventeen years. I am grateful to all the nurses who have gone before me. They have done much to bring about the health and the good attitude toward health teaching that the plantation people have today.

\* Kekaha Plantation, Kauai.



There are 2,400 people on my plantation. About 600 of these are school children, 220 are pre-school and 67 are infants under one year. The distance which I must travel is never more than 18 miles. Most of the roads are good. Occasionally I go far afield and get onto a very dusty cane road, or in the rainy season I must be careful not to get stuck in the deep mud. I work closely with the plantation physician, personnel manager, the Board of Health nurses and the various social agencies.

My tuberculosis nursing includes all arrested and contact cases. These all attend clinic and are under close supervision. Clinic is held once every two months in cooperation with the Medical Director of Mahelona Hospital. In the chest survey of 1944, 1,510 plantation people had chest x-rays. No active cases were found but some cases were admitted to chest clinic.

At the time of the chest survey people were given the chance to have a blood Wassermann taken. Fifteen hundred plantation people took advantage of this opportunity. All known venereal disease patients in need of treatment are taken care of by the plantation physician. There is no regular clinic. Each patient goes to the dispensary as a private case. I usually have one conference with each patient. If any become delinquent in treatment, it is reported to me and I make another home visit.

My program includes orthopedic nursing and mental hygiene nursing. These cases are few in number and are cared for jointly by the plantation physician and the Board of Health consultants.

There are two grade schools that I visit. I do not have any special day or time set aside for this work. I visit the school early in the school year and meet with the teachers. If they have any questions concerning the school health program I try to help them. We plan meetings according to the teacher's need throughout the school year. I do try to stress in the school, as in the home, the necessity for good mental and emotional health as well as physical health. The happy atmosphere of a school room will do much to help the maladjusted child and the child who is delinquent.

The plantation sponsors a kindergarten. We are trying to get these youngsters off to a good start. I mention the kindergarten because I help the teachers plan their programs and the mid-morning lunch. I want my teachers to be health minded as I myself try to be. If we are health minded we will be more sensitive to the presence of all abnormal conditions.

Maternal Health Conferences are held at the

plantation hospital every week. Mothers from adjoining plantations and mothers carried by the Territorial nurse attend conferences the first and third week of each month. Mothers from my plantation attend the second and fourth week of each month. The public health nurse from Olokele plantation, the Territorial public health nurse and I help at every conference. This leaves more time for conference work and group teaching. Mothers usually attend once a month until the seventh month of pregnancy and then are seen every two weeks or even weekly if requested by the physician.

I have three Child Health Conferences a month to meet the needs of about 287 infants and pre-school children. The Territorial public health nurse helps me at each conference. All children do not attend every month but are given appointments according to their individual needs. Under the plantation doctor's supervision, I give all immunizations ordered with the exception of vaccination for smallpox. All babies are vaccinated against smallpox before they are discharged from the hospital. At the Child Health Conference I give the following: Three doses of pertussis vaccine beginning at the sixth month, two doses of combined diphtheria and tetanus toxoid beginning at the ninth month, and three doses of triple typhoid vaccine at three years of age. I do not "peddle pills" or give out any medication, unless it is specifically ordered by the physician for a specific case.

Home visits are made to all prenatal cases at least once and sometimes twice during their pregnancy. More calls are made if the individual case requires it. Postpartum visits are made soon after the mother returns from the hospital. At this visit, not only the mother is talked about, but much attention is given the new baby. A demonstration bath is given and the baby routine as outlined by the doctor is explained. Usually our babies are given orange juice and cod liver oil from the second day of life. Sun baths are started the day after discharge from the hospital.

My office is in the plantation health center. I start my day there, spending about an hour and a half doing records or talking with plantation people, usually mothers, who come to me with their many problems. I can't always solve them, as I don't know all the answers, but it is usually possible to find someone who does know the answer or knows where it can be found.

I wish you could visit me on my plantation. I'd like to show you my job, not just tell you about it. It is the most stimulating work I have ever done. It has many interests and many different types of

people. They are friendly and agreeable and very hospitable. Not all learn what I attempt to teach, but all are friendly. I feel that they like me as much as I like them.

My days are very much alike—yet all are different. Each personality I meet is different and each problem brings its own perplexities. The questions that are asked range from “May I use Taro-Lactin in my baby’s formula?”—to “Shall I divorce my husband?” You might think I stray from the nursing profession, but let me tell you that any problem, be it great or small, that has a direct effect on the family relationship, *is* nursing. I consider it scientific nursing; scientific nursing for health.

Just as the management of my plantation must use scientific methods to produce the best sugar cane and must call on the experts to help them do it, so in my work must I call on the experts who have the knowledge and enlightenment which has come through research and discovery in the fields of child psychology, medical and nursing principles and practices, chemistry, physiology, bacteriology and nutrition.

My main interest, and the work that takes most of my time, is sharing my knowledge with the mothers, helping them to understand how valuable their work is and what rich dividends it pays when it is well done. I am going to read an excerpt from a little booklet called *Blue Ribbon Baby*. It will show you what I am trying to put across in my scientific nursing for health.

Everything that happens to people during their growing-up days can have an effect, good or bad, on the coming of their own babies years later. As they have grown from babyhood into childhood, into adolescence and adulthood, the kind of home in which they grew up, the friends they have made, their attitudes about living with others, the way they have learned to meet life’s problems, their character, the fun they have had in life, their health, their diet, the diseases that have laid them low—all these have helped to make them what they will be as parents.

When parents of today understand all this, we will be sure of better babies and better parents in the generations to come. Then parents themselves will be practicing nursing—scientific nursing for health.

### III: SCHOOL NURSING EVA PEYTON\*

More and more, schools are becoming converted to the view that each student in the school is an individual; that he has certain characteristics and needs, and in many instances limitations, which

necessitate working with him as an individual. The modern school emphasizes understanding the pupil’s limitations, problems, needs, interests, attitudes and all of the other factors that make him what he is. Knowing about his health and physical make-up is a part of that understanding. This is, in essence, the meaning of the term “child centered.”

When he enters school an attempt is made to discover his needs and problems and limitations from a health standpoint. Throughout the grades cumulative records are kept. Physical health is only one part of the total health of the child. The school is concerned as well with his emotional, social and mental health. The teacher, for instance, is perhaps more concerned with his educational growth but must understand the importance of his physical and social development in order to render him the service which her particular training offers. The school counselor is mainly concerned with his emotional and social growth but she keeps in mind at all times his physical and mental development. The school nurse or health director places her emphasis on the physical growth of the child, yet at all times she recognizes in her relationships the mental, the emotional and the social phases of growth. The results of these various phases of pupil growth are in the hands of those who have made one or the other fields her specialization—each recognizing the importance and place of the other’s work. Only in the ideal parent do we find one person whose concern is for all these phases.

In this paper, the discussion will be limited to the health program as it operates at Farrington High School in Honolulu where I serve as school nurse and health director. As in all schools, the principal is the administrative officer and as such is primarily responsible for the organization of the program within the school. Upon his interest and understanding is dependent a well rounded program. He is the coordinator who makes it possible for all specialized workers to give the best possible professional services to the children in his school. Through his health director, co-ordination of school and community health programs is effected.

The school nurse has many more teaching opportunities than nursing ones. She organizes the health program throughout the school, attempting to cover the health needs of the students. She carries out the principles of public health; she finds students with health conditions and follows through under the guidance of either the family physician or the school physician until such conditions have been corrected. She interprets medical

\* Farrington High School, Honolulu.



findings to the child and others who are concerned with his well being—the parents, the teachers and the counselors. Correction of health conditions, however significant, is but one phase of her program. More important is the teaching opportunity that the student's health status offers—the opportunity to bring about a realization on the part of the child that he changes from day to day; that he is considered in his total situation; that his feelings and personal dignity are respected and that he possesses the ability to assume responsibility for and to himself and to the community of which he is a member. In order to bring these about the school nurse consults with the student in a quiet comfortable environment, attempting to make this situation a learning opportunity for him and an opportunity for her to give sound health guidance. In such a situation a student comes to know the reasons, if they are known, for his particular health condition, the steps he can take toward correction of these conditions or what adjustments must be made. The student thus feels that his school emphasizes important things concerning health.

In the matter of the physical examination, a deviation from the usual mass survey has taken place. The referrals to the nurse are made by the classroom teacher who is guided in the observance and detection of significant variations in the child's health. The referrals are such that they are for a correction of health defects rather than the old time dispensary type of service. The ensuing physical examination is one which is selective and permits more time per student by the school physician for the medical conference. At this conference the school physician has an excellent teaching opportunity for he sees the student in the presence of the parent and health director, with sufficient time for conference with the three persons most concerned. Thus, the school physician plays his part in the program as it affects the student. When the physician is not present at the school, the health guidance is in the hands of the health director. Both these health counselors and the others are concerned with seeing that the student during his school period and when he leaves school is in the best attainable emotional, physical and mental health. The nurse assists the classroom teacher with her teaching program by supplying her with health educational materials and information. She works with the Division of Health Education and other agencies in obtaining and distributing health materials. She secures audio-visual aids for correlation with classroom work. She makes studies of health programs that might be introduced into the school classroom at some future time.

As an example of this past year, a study has been made in health and human relations at the request and under the supervision of community organizations. The nurse also invites specialists in health work in fields such as tuberculosis, venereal disease, child health, psychiatry and medical research to staff meetings in order to provide some in-service training for teachers.

At certain times during the year, school surveys and special health programs are instituted and carried out. They include the vision testing program, tuberculosis and x-ray program and the hearing testing program. For an effective school program, there should be a correlation of health units with the total health picture and the allowance of sufficient time in the school curriculum for those topics related to health to be effectively included.

To me, school nursing has been very satisfying in that health guidance has been the major portion of the work. Daily association with co-workers of other professions and backgrounds has been socially and intellectually stimulating just as teachers have told me that they have the same feelings when they have worked with nurses and others in fields other than teaching.

#### IV: PUBLIC HEALTH NURSING BUREAU

LAURA DRAPER\*

Our Bureau supplies the nursing staff for a number of Bureaus in the Board of Health, including those of Maternal and Child Health, Crippled Children, Tuberculosis, Communicable Disease, Venereal Disease and Mental Hygiene. The major part of our time goes into work with mothers and children. We begin in the prenatal period, trying to be sure that every mother is under medical supervision early in pregnancy and that she understands her doctor's directions and carries out a good regimen. Where enough mothers are interested, we have classes for them. We have been carrying one on for over a year at Kapahulu Health Center. Patients who cannot arrange for private medical care may attend our Maternal Health Conferences. We visit them at home as need arises.

Before the baby is born, we have explained the importance of medical supervision and when he arrives we make every effort to see that he is under the care of a private physician or attends one of our conferences. In either case, the mother may have our nursing service. We particularly like to be called when the mother goes home from the

\* Director of Public Health Nursing, Territorial Board of Health.



hospital, for what we can give her in the first day or two is usually met with a high degree of receptivity and put into use. Mothers frequently want to see how to bathe the baby at home and then are glad to have the nurse return while they do the bathing. Much information about other phases of infant care can be given at this time. At our conferences we carry the children up to school age, helping parents understand their growth and development, emotional and mental, as well as physical.

When the child goes to school, he sees our nurse again for we supply the public health nursing service to most of the schools in the Territory. And if he is crippled and under the care of the Crippled Children's Bureau, it will be our nurse who helps his mother with treatments.

You all know of the problem which tuberculosis presents and an increasing amount of our time is going into that. We staff clinics, try to get contacts under care, try to see to it that patients waiting for sanatorium beds and those recently discharged from a hospital follow a good regimen.

Running through all our work is interpretation of good nutrition and interest in the promotion of mental and emotional as well as of physical health.

So much for our program—the high spots. Now, what is it that we are all trying to do? We are trying to promote family—and so community—health. To do this, we are taking the principles of preventive medicine into homes and schools and by applying them in individual situations, helping get them into actual practice.

What is the future of public health nursing? I am no crystal gazer, but there are two things I can see. One is that there is going to be increasing employment of public health nurses. The trend of the last ten years, and pending legislation, make this apparent. The other is that the status we are going to enjoy will depend upon our own performance.

From what has been said this morning, you will realize that the opportunities which the public health nurse has for usefulness are very great. Can we, as public health nurses, meet these opportunities? What does meeting them require from a nurse? A good deal. She must have sound and up-to-date information in all fields of health and she must have knowledge of other community agencies and how to work with them. But these become as nothing unless she has an understanding and imagination that enable her to work successfully with people. She must be able to evaluate what the client knows, so that she can begin

where he is—not bore him by telling him what he already knows, or puzzle and confuse him by assuming that he knows more than he does. She must have perception as to his attitudes and as to what will move him to action. Affecting people's behavior requires skill and time. No one can step into a community and do this immediately. It takes time for families to develop full confidence in and appreciation of a nurse, and for her to fully understand them.

The nurse who realizes her capacity for success is the nurse who stays in her community for a length of time, who through reading and discussions keeps abreast of modern thinking, and who through her sensitiveness and listening ability becomes increasingly understanding of people.

Such public health leaders as Doctors Winslow and Hiscock of Yale, and Dr. Haven Emerson of New York, have spoken of the public health nurse in almost lyrical terms as *the* great health educator. Others, among them some physicians, look upon her apprehensively as a disturbing manifestation of state medicine. The majority of people have only the vaguest idea of what she does.

The subject of these meetings is post war planning—an effort to look ahead, to be sure that our nursing path leads up, not down. The public health nurses' place in the professional world of the future depends upon how fully they live up to their possibilities. Each one of us has the chance to help make it a place deservedly high in public esteem.

## REPORT OF THE EXECUTIVE SECRETARY

The following committees have been appointed by the President and approved by the Board of Trustees:

### STANDING COMMITTEES

<i>Revision and Membership</i> Phyllis Cox, Chairman Hazel Mattson	Esther Kekela Rosie K. Chang Vera Hansel
<i>Nominations</i> Patience Clarke, Chairman Ella Hand	Ethel H. Brown Elizabeth Marks Effie Dewar
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✓ ✓ ✓

On June 1, 1946 Mrs. Thelma H. Brown resigned as Executive Secretary of the Nurses' Association, Territory of Hawaii, and Director of the Nursing Service Bureau, to become superintendent of Shriners' Hospital for Crippled Children. Mabel Johnson, whom she is replacing, is to become a Nursing Consultant for UNRRA in the China Mission.

✓ ✓ ✓

Honoring Miss Albertine T. Sinclair, R.N., Superintendent of Nurses at Leahi Hospital for the past twenty-three years, a farewell luau was given by the hospital staff at the Nurses' Home on Sunset Avenue, April 29. Her resignation became effective May 1, 1946. Miss Sinclair is well known in nursing activities in the Islands and has contributed largely to the advancement of the profession through her tireless and energetic service on many committees. Her splendid work as Superintendent of Nurses at Leahi Hospital will be difficult to emulate. Throughout the war years when

much was demanded of her in her official capacity, she generously contributed time and energy to multiple USO activities. She now plans to visit friends on the various Islands for several months before returning to her home in Boston. When conditions permit she plans to travel extensively. Many thanks and best wishes to you, Miss Sinclair!

✓ ✓ ✓

Miss Patience Clarke became Superintendent of Nurses at Leahi Hospital on May 1, 1946, resigning as Director of Nursing Education at this Hospital to assume her new duties. Miss Clarke was in charge of Wahiawa Emergency Hospital from March 1942 to February 1945 at which time she returned to the mainland for special study in tuberculosis nursing. She began her work as Director of Nursing Education at Leahi Hospital in September 1945 and organized the course for student nurse affiliation from local training schools.

✓ ✓ ✓

It is a pleasure to have Miss Charlotte Kerr back with us after an absence of two years. She is now Director of Nursing Education at Leahi Hospital. Prior to her return to the mainland, she was Director of Nursing Education at Queen's Hospital.

✓ ✓ ✓

On June 1, 1946 Mrs. Hazel Mattson resigned her duties as Superintendent of Children's Hospital. As far as we know she has made no plans for the future except to enjoy a prolonged vacation from nursing and hospital activities.

## SPECIAL NOTICE

Through the courtesy of the Hawaii Territorial Medical Association the Bulletin Committee is able to accept advance orders for the loveliest calendars made available for some time. George and Louise Armitage are presenting this Hawaii souvenir calendar for 1947 which contains seven unusually beautiful kodachrome prints of Island scenes and will be packaged in tapa print cardboard, ready for mailing, at \$1.50 per copy. These calendars will be on sale in local stores later in the year, but the Nurses' Association Bulletin Fund will be credited with a percentage of all sales made through our organization.

Please send in your orders through the Bulletin Committee Members as early as possible. Samples are being forwarded to each County Association Secretary. The calendars will not be available before September or October of this year.

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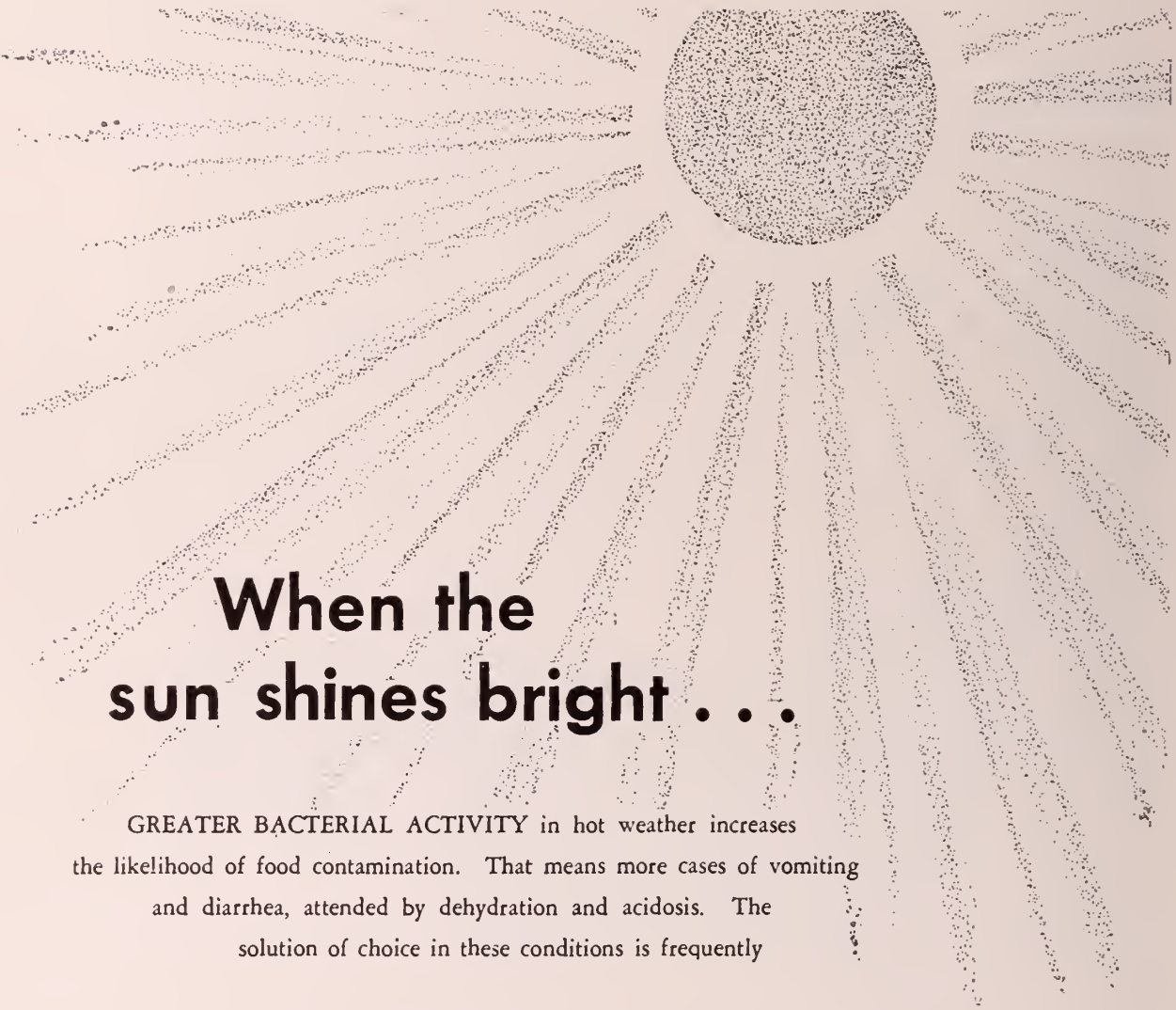


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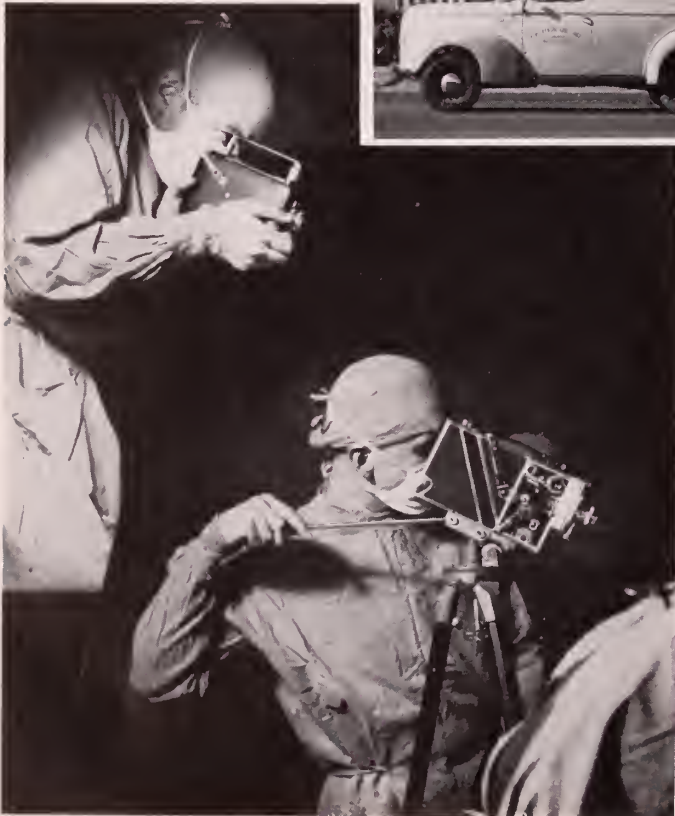
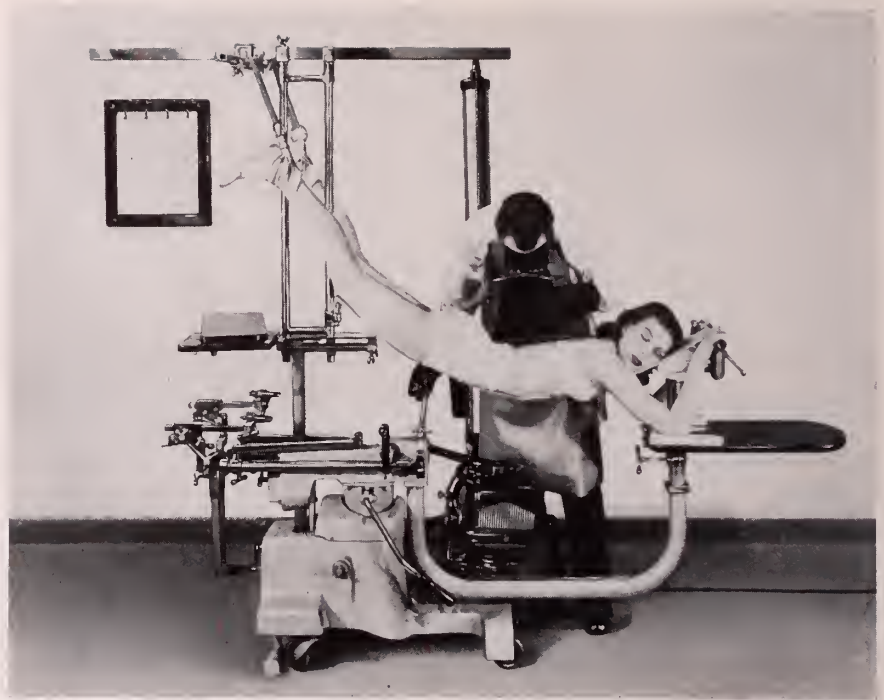


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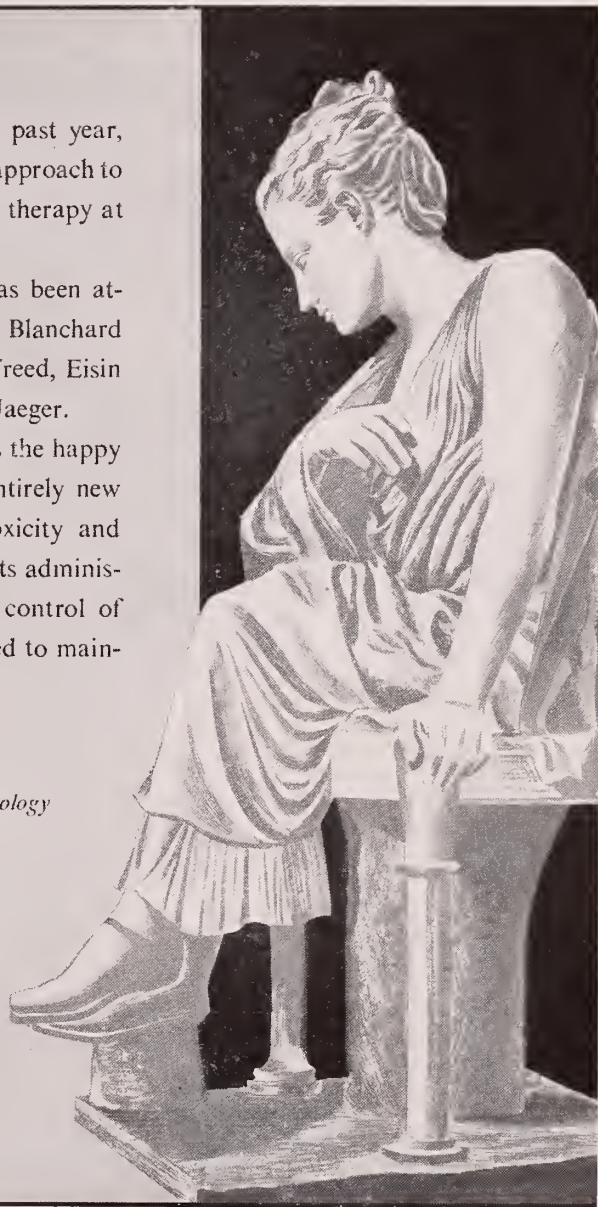
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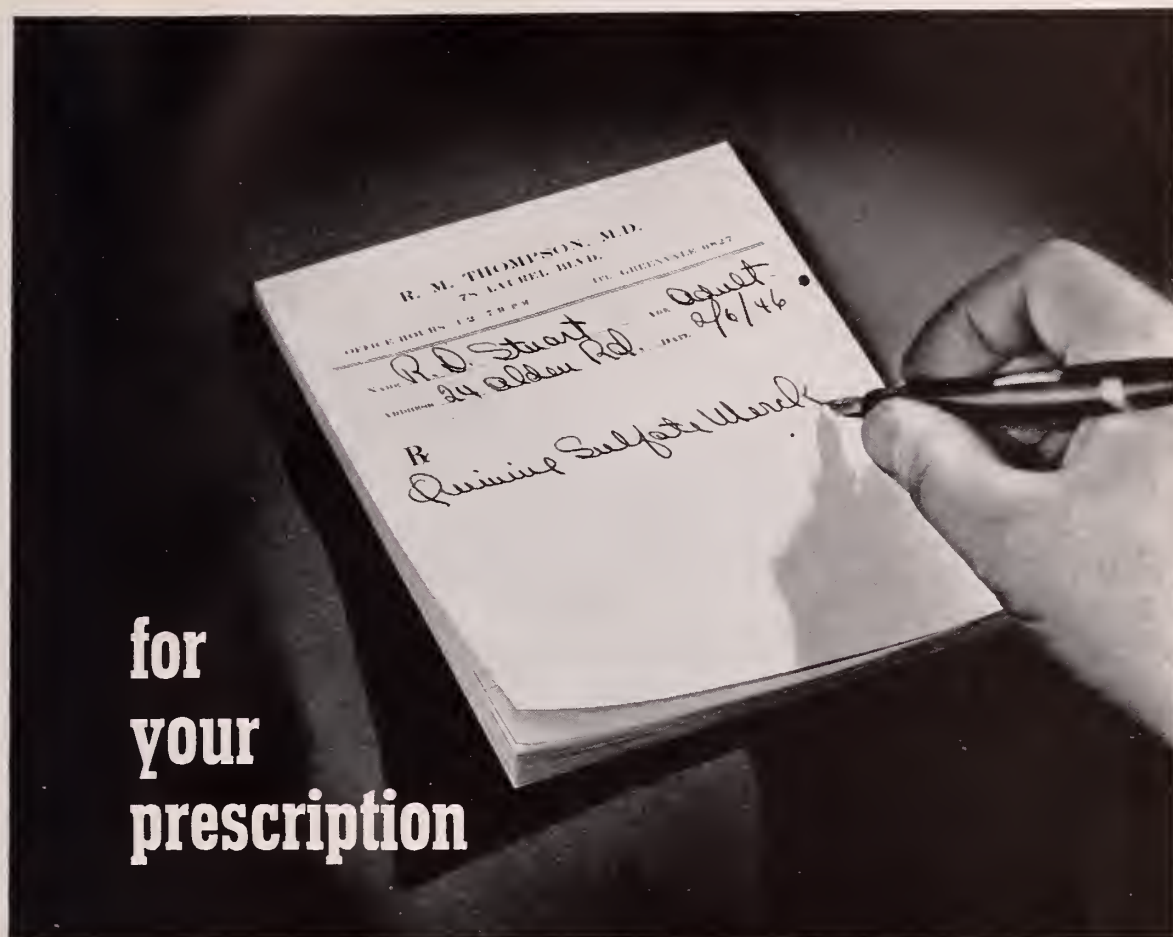
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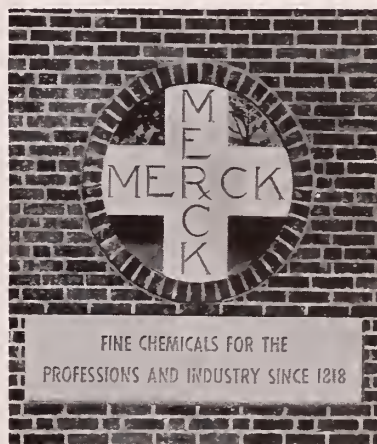


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In the crystalline state Penicillin Sodium-C.S.C. is so pure that it can be administered subcutaneously even in large doses with virtually no pain or danger of untoward reactions due to impurities.

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\*CAUTION: Once in solution, however, penicillin still requires refrigeration.

Crystalline Penicillin Sodium-C.S.C. is available in serum-type vials containing 100,000, 200,000, or 500,000 units.



Penicillin-C.S.C. is accepted by the Council on Pharmacy and Chemistry of the American Medical Association

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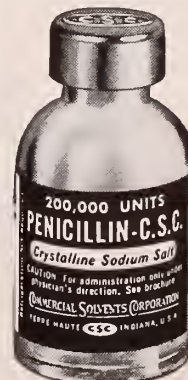
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<sup>1</sup>"The potency of the penicillin undoubtedly affected the results. The first 15 patients, all treated with the same batch of penicillin, were cured. The next 7 patients were treated with the same dosage of a different batch of penicillin. Five of these 7 were not cured. Assays of penicillin used for these 7 patients showed it to be of reduced potency." Trumper, M., and Thompson, G. J.: Prolonging the Effects of Penicillin by Chilling, J.A.M.A. 130: 628 (March 9) 1946.





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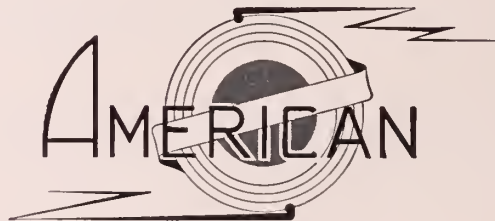
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1. Freed, S. C., and Greenhill, J. P. (1941), *J. Clin. Endocrinol.*, 1:983, December.

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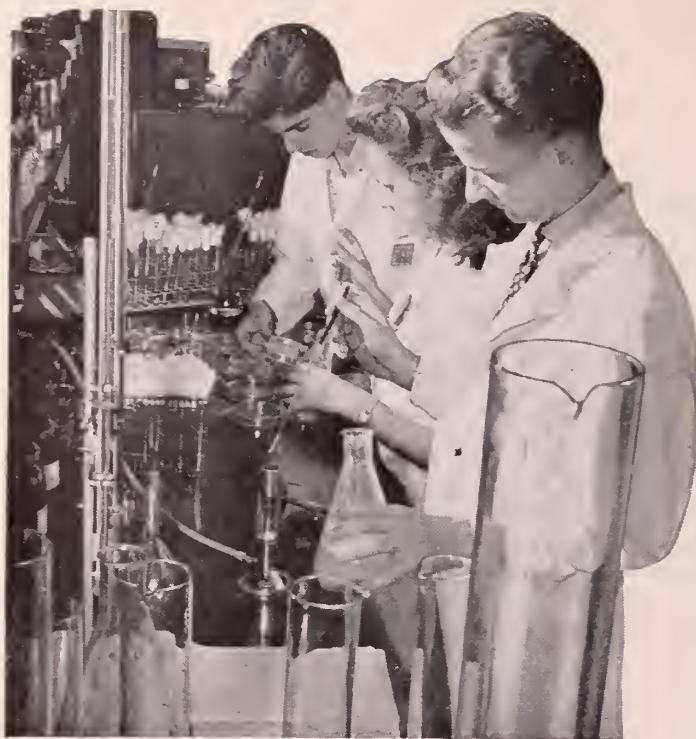
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\*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, *Am. J. Dis. Child.* 66:1-11, July 1943.

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